

Undismayed by being caught up in the Government's campaign to curb local authorities the Inner London Education Authority is in the middle of a wide-ranging review of post-school education in LONDON. Karen Gold, Maggie Richards and Patricia Santinelli report on its progress (page 11)

The language of PHYSICS: Frank Close explains the increasingly exotic language used by particle physicists to describe what is happening on the expanding frontier of their discipline (page 13)

Alan Baker discusses the impenetrable jungle that undergraduate admissions to OXBRIDGE have become in recent years and explains why Emmanuel decided to drop out of the Cambridge entrance examination (page 15)

...And the street in an important managerial post like mine is something terrible...



The next steps for MANAGEMENT education? David Weir, John Sizer, Peter Holmes, and Samuel Eilon are among the contributors to an eight-page report. There are also two pages of reviews of new books in management (pages 1 to 10)

The battle of the TEXT: Iain Wright reviews a new book by Edward Said which attempts to find some common ground between the traditionalists and theoreticians whose war is tearing English studies apart (page 17)

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The disadvantages of too many books
George Holmes on medieval marriage
The rewards of good teaching



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Punitive and partisan

Sir Keith Joseph is to make his third - or is it fourth? - attempt to sort out those sociologists at the Polytechnic of North London. Sorry, I will write that again. The Secretary of State has announced that he is to establish a committee of inquiry "to identify and examine key issues for the effective and efficient maintenance and improvement of academic standards in the way these responsible for the academic validation of first and higher degree level courses in the public sector in Great Britain discharge their responsibilities".

Sadly, there can be little doubt which of these two descriptions of Sir Keith's decision to set up an inquiry into academic validation in public sector higher education is the more accurate. His decision has grown directly out of his continuing concern about what is going on in just two departments in a London polytechnic, the departments of sociology and applied social studies at the Polytechnic of North London. The Council for National Academic Awards is now the intended victim mainly because it has failed to go along with the Secretary of State's anxiety and maybe because it once took a dangerously dismissive attitude to the academic claims of the University of Buckingham. Whatever its final outcome, the proposed committee of inquiry has entirely disreputable origins.

Every politician has to be allowed one or two feistish issues. In the case of Sir Keith there have been three - a charter for Buckingham, the attempted abolition of the then Social Science Research Council, and the war of attrition against the PNL sociologists. Indefensible as his behaviour on all three has been, none impinged very substantially on his mainstream higher education policies. These have been rather more sensible than many opponents of the present Government have been prepared to admit, although the overall context in which they have been set is the blighted product of Mrs Thatcher's antipathy to the postwar welfare state.

This latest development means that it is difficult to continue to adopt such a permissive attitude to Sir Keith's feistish policies. For they have now begun to contaminate the mainstream. No amount of mumbling about the parallel with the Reynolds study group on academic standards in the universities can conceal the clear evidence that this new committee of inquiry has arisen directly from the Secretary of State's obsession with PNL. The immediate result is to undermine the credibility of the Government's general policy for higher education, the solid progress that has been achieved since the crea-

tion of the National Advisory Body in the case of polytechnics and colleges and the future progress that may be expected as a result of the University Grants Committee's "great debate" in the case of universities. Sir Keith is putting at risk the real achievements that could mark his period of office at the Department of Education and Science, a very high price to pay for nailing those sociologists at PNL.

For the terms of reference given to the new committee leave no doubt that its function is to conduct a damaging inquiry of the CNA, which together with the Open University has been one of the few unambiguously successful institutions created in British higher education during the last 20 years. Sir Keith's letter to Sir Norman Lindop, the former director of Hatfield Polytechnic who is to chair the committee, states quite bluntly: "I have for some time, however, felt that existing arrangements might be improved; and some recent reports from Her Majesty's Inspectorate have strengthened that belief."

The letter then lists nine "particular issues" that are drawn to the committee's attention. Only two, possibly three, address issues that by common consent deserve to be discussed as part of a wide-ranging review of the future function of the CNA. These are the cost to institutions of CNA validation, the progress towards a genuine partnership between the council and its more mature client institutions, and the relationship between the approval of individual courses and institutional validation. The other issues are all "PNL-related". The relationship between the formal approval of a course and its actual realization; rigorous and sufficient assessment of objectives; the design, presentation, assessment, and examination of courses "in a fair and balanced way"; and ensuring that the abilities of students are consistent with the structure and content of courses - it is difficult not to detect in all these ideas a strong sniff of the PNL affair and an equally strong indictment of the past performance of the CNA.

An even more alarming interpretation is possible. For it can be argued that the new inquiry adds up to an indictment not just of the CNA's performance but also of academic standards in the non-university sector at large. Not a single serving polytechnic or college teacher has been invited to join the committee. Nor are its university members remarkable for their public sympathy for or detailed knowledge of what goes on on the other side of the binary line, with the possible exception of Sir Alec Morrison and Mrs Mary Warnock. So the membership of the commit-

tee suggests a deep lack of confidence on the part of Sir Keith in the ability of polytechnics and colleges to keep up their own standards. It would be interesting to know if this is also the view of Mr Peter Brooke, the chairman of the National Advisory Body's committee, and of the senior DES officials who sit on the NAB board. The only consolation is the chairman himself, Norman Lindop is a man of proved integrity and showed during his earlier chairmanship of the Data Protection Committee truly liberal instincts. Both will be needed on his new committee.

What can be salvaged from the first successful and serious riposte of Sir Keith's fetishes into serious higher education policy? Two things perhaps. First, it offers an opportunity to come to the defence of the CNA. Cumbernole, bureaucratic, rigid the council may be, but no serious person can pretend that it has not made, and makes, an overwhelming contribution to setting and maintaining high academic standards in the non-university sector. *Si monumentum requirit, circumspice*, the CNA may legitimately claim, pointing to our strong, vital and respected polytechnics and colleges.

Second, Sir Norman may be able to steer the committee away from the PNL-related issues to the serious ones. Whatever its baleful origin, this committee does provide an opportunity to reassess the CNA's experience in a positive light. After all, the council is now 20 years old and a lot has happened since the high noon of Robbins. It may be time for a new look at aspects of its work, particularly its sometimes edgy relations with the senior polytechnics. The operation of the NAB, and the CNA's controversial contribution to that operation, mean that in any case some reassessment is required.

So with a lot of luck we might get the right inquiry even if for the wrong reasons. But there is still a real danger that as much, or more, may be lost as gained. Ultimately high academic standards can only be produced by good teachers backed by well managed institutions; they cannot be bullied into existence by HMIs, the CNA, or other forms of external inquisition. The commitment of teachers reflects their morale which in turn is heavily influenced by the support they are given and the esteem in which they are held. The danger with the present inquiry is what whatever modest improvements it may be able to produce eventually in the CNA system will already have been more than cancelled out by the demoralization created by the partisan and punitive decision to establish it in the first place.

A hard road to travel

Ministers have made no secret that rough justice for some was inevitable under new arrangements for student travel costs. Sacrifices were judged necessary in the quest for administrative savings and some relief for local authorities faced each year with the risk of vetting thousands of claims from the students who spent more than the £50 included in grants.

If that was not sufficient justification, the need to plug an open-ended and uncontrolled element of public expenditure was paramount. And so the outcome was predictable: the formula favoured by ministers at the outset of the brief consultation period, with an added concession to meet the fears for existing students who might otherwise be hit very hard.

So we should not be surprised that there is rough justice. Despite the concessions and the bonus payments, but the resulting dog's dinner may prove indigestible not only to the unfortunate recipients but to a considerable number of universities and other colleges who find themselves adversely affected when students enjoin Sir Keith's injunction to decide

how best to budget within the new overall grant. The anomalies are several. It is proposed that while existing students between the new flat rate levels and the concessionary safety net will inevitably lose money, large numbers who have never had to make a claim for reimbursement will receive an unsolicited windfall. What is the sense, let alone the justice, of arrangements which give some a no-strings handout while others who in the past have patiently satisfied their authorities that they legitimately spend on travelling are penalized?

Students lucky enough to find campus accommodation are rewarded, while those who choose or are forced into bedsit (and will not only have to endure the grind of daily travelling and its effect on their academic effectiveness but be penalized financially into the bargain).

And the glaring anomaly follows from the Scottish decision, based on sound evidence and hard data, not to follow the English and Welsh example. Now Northern Ireland has been introduced into the English and Welsh system, will be financial discrimination in

favour of Scottish students. UK students, identical in every other respect, will be reading the same courses, attending the same lectures, living in the same place and travelling the same distances. But by an accident of domicile, Scots will be able to carry on claiming while their fellows from the rest of the UK - unless they fall into Sir Keith's temporary safety net - will not. Students will of course make rational decisions within their budgets and the effect will be increased pressure on the lucky few institutions with on or near campus accommodation. The others, green field institutions such as Lancaster or Warwick dependent on note-so-nearby seaside resorts or dormitory suburbs with bedsit capacity but heavy travelling costs, will slide down the league table for reasons totally unconnected with their academic reputation.

Some will plump for Dr Boyson's old hobbyhorse of home study, tempted by the higher flat rate travel element in their grants. But the effect is to throw yet another wild card into the pack, opening the prospect of trouble in the colleges and a distortion of student demand.



The University Grants Committee is now preparing to consider the 350 replies to its "strategic questionnaire".

Look there's no point in trying to push Brunel any more.

What's that?

I said, "Stop pushing Brunel. I was only trying to help."

I know, but can't you see it stuck fast and you're only going to bring down the whole doorway.

It only needs easing a little at the top. That's where it's stuck. But I can't reach up there.

Well, stand on East Anglia. That'll give you an extra foot or so.

No, I've tried that. It's still too low. Have you got anything about the same size I could put on top of it?

What?

Anything about the same size as me to stand on.

Erm... nothing much. Nothing ham. No, that's too big. Durham.

Far too big. There's Leicester. But I wouldn't risk that. The string's already coming loose.

Well, what about back down the hallway or on the pavement outside. Anything there?

Doubt if I could get through now. Peter's been stacking them up behind me. I can hardly see past this huge Recorded Delivery from the Institute of Education and then there's that enormous AUT which he's propped up on top of Heriot-Watt.

Look, d'you think you could shout for him to pass something suitable. After all, this whole business was his idea in the first place. I didn't expect anything like this when I joined the committee. It's worse than Pick-fords. I mean I can hardly see a thing now that we've got Loughborough and Surrey stacked in front of the window. And I'm only keeping UMIST up with my left foot.

Well, I'll shout. But you know what Peter's like when he's in the middle of a job. Deal to all entrepreneurs.

Tell him something small - and fairly solid - about Birbeck Street. Right, Peter. Peter. Can you hear me? No, it's no good. Look, tell you what. Let me give you half of Sussex. That'll be about right. Questions 1 to 14.

That's excellent. Nearly there. Another couple of inches. A CVCP appendix on tenure - marked "secret".

That'll do nicely. Oh my god.

What is it?

Now that I've moved Sussex. Yes.

I can see right down the hallway. Yes.

Past the Institute of Education. Yes, yes.

And you're not going to believe this.

What?

The whole AUT's fallen on top of Peter.

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It's all quiet on the Western Front after last week's "shooting" in the trenches at Bournemouth and Poole College of Art and Design. The Front, a 100-foot long, 10-foot high re-creation of a First World War trench, was the set for a 20 minute film drama made by film and television production diploma course students. The Pioneer Corps from Warminster, three weeks to build the trench on wasteland and the back of the college.

Universities protest at VAT

The University Grants Committee is making strenuous protests against budget changes which have presented universities with an extra annual £5m bill for building alterations.

From June, Value Added Tax of 15 per cent will have to be paid on building alterations. The TUC has calculated that this will cost about £3m annually, and another £2m will go on taxable repairs and maintenance. The UGC also fears that the UK will eventually follow Europe and impose VAT on all new building.

The problem is acute for universities in the middle of building programmes. Southampton for example, presently extending its library at a cost of £4m

will suddenly have to find £700,000 for VAT.

Cambridge has £900,000 worth of alterations work in prospect, which will now be subject to VAT. Strathclyde will have to pay VAT on the £1.5m it is costing to replace its radiators.

Serious concern at the new charges was expressed last week at the universities' building officers' conference at the Open University. It was agreed then that universities should try to avoid the charge by building extensions that were not connected to the original building, and adding small linkways later.

Universities are responsible for any

DES is wrong on student numbers, say statisticians

by Ngaio Crequer

Demand for higher education is likely to increase throughout the rest of this century, according to a report of the Royal Statistical Society, which has examined differing projections made by the Government, the Royal Society, universities, the lecturers' union and others.

The Statistical Society has been acting as "honest broker" to try to reconcile conflicting claims about projected student numbers, and examine underlying assumptions.

The report will be a serious blow for the Government's strategy of contraction and may cause it to rethink some of its policies. The Department of Education and Science has predicted a 14-19 per cent fall in total higher education numbers between now and the end of the 1990s, and the Government's latest expenditure review assumed the worst projection for planning purposes.

The society's main conclusion is that relative to 1980/81, far from being a decline there is likely to be an increase in the demand for higher education throughout the remainder of this century.

The report by a working party and not yet considered by the society's council, is strongly critical of the DES projections in its *Report on Education 99*.

The working party says the DES provides neither a methodology or source on data for any of its claims, making it "impossible to pass any sensible judgement on the DES projections." They recommend the DES provides full details of how it arrived at its figures.

It also suggests that the department collects data on the age, sex and social class of entrants to the public sector (already available for the universities), and produces separate demand figures for each sector.

The group commends the method used by the Royal Society in calculating the effect of social class, because it

alone fully takes into account occupational mobility. Of the main papers examined, only the Association of University Teachers explicitly takes account of the effect of greater female participation. The working party says that as more girls are taking O levels, and taking into account the social climate and comprehensive education, the female participation rate will continue to rise.

The working party proposes that 1980/81, or an earlier year, should be the base year from which projections are calculated. This was a year before the recent university cuts when it could be argued, they say, that demand was satisfied from adequately qualified students. And in the public sector, supply of places then seemed sufficient.

Choosing a base year will implicitly set the standards in a level or equivalent terms for the projections of future entrants, thus setting the 'price' at which demand is assessed.

The group considered there were five major factors affecting future demand: age, sex, social class, country and availability of places. Secondary factors were occupational mobility, mature students, overseas students, demand for skilled manpower, income elasticity of demand for higher education, social climate, postgraduates, part-time students and continuing education, unemployment, and comprehensive education.

Accordingly the group believes: occupational mobility and developments in information technology will increase; if demand is not met in the 1980s it will be felt in the 1990s as an increase in mature students; changes in job structures suggest increased demand for highly skilled manpower. Failure to meet it could inhibit economic expansion; growth in the economy will increase demand; female emancipation should increase demand; comprehensive education may increase female participation; and demand for continuing education is likely to rise.

Pay deal boosts lower paid college lecturers

by David Jobbins

College lecturers are on the point of breaking out of their paylogjam with a deal which gives a 4 per cent rise and 7.4 per cent to staff stuck at the top of the lowest salary grade.

An urgent review of salary structures included in the package negotiated with the local authorities this week also holds out the prospect of a more permanent solution to the blighted career prospects of the 12,000 lecturers at the top of Lecturer 1 scale. But the employers also stand to gain from the findings of the "fundamental" review which they hope will find ways of increasing the efficiency and flexibility of the further education service in time for next year's pay negotiations.

The provisional settlement is for 4 per cent with £330 for lecturers on the top point of the L1 scale. This compensation for limited chances of promotion will bring their salaries from £9,735 to £10,454 from April 1. The salary of a senior lecturer at the top of the scale, the traditional point of comparison with the top of the university lecturer scale would rise from £13,443 to £13,981.

Provisional agreement only could be reached because the main union the National Association of Teachers in Further and Higher Education has to consult its members.

General secretary Mr Peter Dawson said that the union would recommend accepting the offer. "An increase of 4 per cent cannot be said to meet the justifiable salary aspirations of further education lecturers. However NAFHE's negotiators believe that the total package on offer is the best that can be achieved in the present circumstances."

In 1984/85 there are clear winners and losers in the £2m redistribution. The two polytechnics that do well, with £500,000 each, are City and Central London, both because of their very high numbers of part-timers. South Bank, hit by its high technology and low female recruitment gets £470,000; North London has £385,000 and Thames £145,000.

As a proportion of their total income - a cleaver indicator since that takes into account their size - the difference is still sizable. City of London does best, with its points money 3.68 per cent of its total grant income; PCL has 3.54 per cent; PNL 2.76 per cent; PSB 2.71 per cent and Thames 1.5 per cent.

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The Committee of Directors of London Polytechnics has written to ILEA saying it agrees with the policy, but wants to be sure of the group definitions and that the collection of numbers is standardized. This year, polytechnics were asked to provide figures for their recruitment of each group, which were collected in November 1983. In future years, the

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Labour wins student vote

Labour has won the presidency of the National Union of Students for a third year - but only just. Only 26 votes separated Phil Woolas (above) from his closest rival, Left Alliance candidate Ms Jane Taylor in the fifth and final round of voting.

It is the narrowest victory in a presidential election since Mr David Aaronovitch, the last Left Alliance president of NUS beat off his Labour rivals in 1981.

Mr Woolas, 24, a philosophy graduate from Manchester University has also studied at a further education college, the first NUS president to have had direct experience of this increasingly significant sector for student politics.

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DON'S DIARY

less cups of coffee. The day passes wholly painfully but quite productively and I'm well into the chapter I'm writing (on mother-daughter relationships in the late nineteenth-century family), for a book on Victorian and Edwardian domesticity.

WEDNESDAY

Pretty much the same, although I'm interrupted by many phone calls from students on teaching practice who want references; also requests from local schools for me to talk to sixth-formers about careers for women. I can't say that I don't sometimes find the immediacy of demands of this kind a relief from the awful testing ground of confrontation between me and blank sheets of paper. Sometimes, not always, I hasten to add.

MONDAY

I wake up as excited as a child anticipating a trip to the zoo today. I'm off to London on the 9.02 to spend a day looking at the Karl Pearson papers in University College. Am interested in finding out about Pearson's involvement with feminists such as Olive Schreiner and Emma Brooke in the 1890s. Some real research for a change: a rare treat these days. No charging around picking up children at lunchtime and again at 5.30pm.

As half of a dual-career commuting academic couple and the mother of two small children, I don't have much opportunity to spend whole days in London. While I teach at Sussex University and live in Brighton, my husband lives in Cambridge, at least during the working week and in term-time. We only get together properly in vacations or when he's on leave. Still, what a colleague once dubbed our "telegamous" relationship has lasted for about ten years now and "we've never known anything better".

My mornings usually begin with me arriving sweating and panting in my office at 9.20 having lugged a six-year-old to school and a two-year-old along to our wonderful university canteen. Today I enjoy the luxury of grabbing a mouthful of instructions about lunch-boxes, nappies, ear-drops and bottles of chocolate milk to my husband; then tear down to the station. I love train journeys: the voluptuousness of an uninterrupted hour's reading! All too soon we lurch into Victoria and I head for the underground. Once in the University College library I sink contentedly into the Pearson papers, working through until 4 o'clock. I stop only once or twice, to pee.

Coming home the train is jam-packed with commuters and I have trouble finding a seat. Eventually I succeed; wedging myself in between a lady encumbered (as I usually am) with shopping bags and a rather clerkish-looking young man. I open Germaine Greer's *Sex and Destiny*. Many of the passengers in the compartment nod off to sleep, including my clerkish neighbour. To my horror his head lolls down limply towards my shoulder, threatening to find repose on my breast. Shall I wake him or take no notice? The lady with the shopping looks on in some amusement. I wonder how the poor guy will respond if the train jolts and he wakes up to find his head on the bosom of a strange lady immersed in reading about anal eroticism. I clamp the book shut (making sure that the nasty cover illustration is face down on my lap) and wake him up. He didn't seem that put out after all.

Get back to find "poor Nick" (as my parents, with their mindlessly conventional ideas about sex roles, insist on calling him) contending valiantly with recalcitrant daughters: ear-drops, bath-time and urgent pleas for help with the Roland Rat jigaw.

TUESDAY

After taking the girls to school and crèche, Nick heads for the university library while I bar myself in my room and write. Or try to write. I never find it easy and have to battle with my own overweening, neuroticism, obsessions, etc. I must have unfilled paper, sharp "B" pencils, a rubber and so forth. I'm not supposed to smoke any more but find myself desperately casting round for oral gratification - chewing gum or end-

THURSDAY

After a rotten night's sleep (our two-year-old kept waking up insisting that there was a giant spotty panda in her bed), I spend the morning writing references. Some of my postgraduate certificate in education students are having dispiriting experiences trying to get jobs. One, potentially a quite gifted teacher, finds the post he is applying for has been cut between the advertising and the interviewing stage.

During the afternoon a colleague and I interview five candidates applying for our new part-time MA course, *women and education*. We're aiming to recruit people with at least five years' teaching experience. Almost without exception, the women we've interviewed over the last few weeks - by no means all of whom would style themselves "feminists" - have experienced a series of career problems and setbacks simply by virtue of being female.

Sussex has a lousy track-record in employing women, even in English and education, subject areas with high proportions of female students. There is at present only one woman among 26 full-time members of the faculty in English (one other is employed half-time); the education area has three of us out of twenty-one. However, over the last few years the small number of women there are on the faculty have made considerable headway in introducing courses in feminism and women's studies, all of which have proved very popular with students.

FRIDAY

Morning assembly at my daughter's school in honour of Mothers' Day. Alexandra was desperately keen for me to be there along with the mothers of the other children in her class. As a feminist, worker and an agnostic I originally demurred feebly but soon relented. Am always amazed by the complex barrage of cultural messages which buzz around on such occasions. One girl reads a story about someone in the Old Testament who found herself barren. Someone else reads a bit of Lebovitz. One by one diminutive children stand up to recount experiences connected with the arrival of new babies in their families. Their descriptions made it quite clear that mothers parent, fathers "go to work". (I glance at my watch. Then we must receive our presentations. Alex brings me a little dish made out of an empty plastic margarine tub coated with polyfilla and stuck about with sea shells. My eyes mist over. We go out while the girls sing "a hymn to Mothers' Day", each verse coinciding with the lines "Father, unto thee we raise/This our sacrifice of praise".

Light-foot it to my office to wrestle with my chapter.

Carol Dyhouse

The author is a lecturer in education at the University of Sussex.

Letters to the editor

Extra mural funding concern

Sir, - The new formula for calculating grant to extramural departments based on student numbers and class attendance (*THES*, April 15) could, if applied without sensitivity, have a serious effect on rural areas such as the south west. Here we have scattered and isolated communities, separated by great tracts of high moor which can produce severe weather conditions in winter. As an act of policy, this department supports small rural classes, and takes into account the low attendances which terrain and climatic conditions sometimes enforce. If grant were to depend primarily on numbers and attendance, we should find it difficult to maintain remote classes in

North Devon and Cornwall, and have to concentrate on the already well-served urban centres. Such a policy involving partial withdrawal of the university from the already deprived countryside communities would be deplorable, and it is hoped that before firm plans are made, these factors will be taken into consideration. Although the rural county of Kent is included in the experiment, this area cannot really compare with tracts of central and north Wales, or a sparsely populated peninsula 125 miles long with a group of islands 30 miles offshore. Moreover, as old patterns of teaching change with advancing tech-

nology, the concept of the "class" becomes frayed at the edges, and with it the notion of "effective attendance". Schemes of independent study, self-advised distance learning and special study groups meeting at irregular intervals, are now widespread. The formulae of a past era, although admirable, have to undergo severe modification if the good in the present system is not to be affected.

Yours faithfully,
T. F. DAVENEY,
Director of extramural studies,
University of Exeter.

Fate of QMC classics

Sir, - There are now negotiations in progress with a view to the transfer of Queen Mary College classics staff elsewhere within London University.

We, the classics students and members of the Classics Society named below, feel that this initiative to transfer staff has the following implications:

● Students of the department may not receive the standard of tuition, consultation and advisory services to which they are entitled.
● Students of other departments would be permanently deprived of the opportunity of studying classical options, eg in language, literature, history, philosophy and archaeology. Many students from other departments presently take classical courses. We feel that this would seriously diminish the possibilities of educational cross-fertilization at QMC which is one of the basic concepts behind the course unit system in operation at the college.

● The closure of the classics department, the founding department of the college, would, we feel, seriously damage the credibility of QMC as an educational establishment, after all, the origins of western civilization lie firmly in the classical world.

We feel strongly that this initiative should be stopped and that those interested in the educational system will be keen to uphold the preservation of QMC as a widely-respected academic centre for both the arts and sciences.

Yours faithfully,
EDWARD HERRING,
President of the QMC Classics Students Society,
With the approval of:
Chris Bell, Isobel Pritchard, James Woodman, Angela Drew, Marilyn Whymann (students of the classics department), Cecilia Ampuero, Philip Cobham, Bettina Parish, Natalie Simmons, Emma Broadbent, David Kincaid, Debbie Owen, (members of the Classics Society).

Trial comet

Sir, - The observational programme on comet Crommelin (*THES*, March 30), mounted as a trial run for the international study of Halley's comet in 1985/86, was supported and coordinated from the UK and by the Comet Halley UK Coordinating Committee.

Countries, including France, the USSR and Britain are organizing their own national coordination, as an adjunct to efforts of the US-dominated International Halley Watch. The need for independent national efforts has been demonstrated by the continuing delay in releasing data-bank standards and by errors in the detailed orbit positions prepared by the US side. The positions were faulty because of neglect of a predictable perturbation to comet Crommelin's orbit by Venus. The second attempt to create at RCL the UK-European team, including Rutherford-Appleton Lab, Sheffield, Kent and Cardiff university members) was, however, successful.

Yours faithfully,
Dr M. K. WALLIS, Secretary, Comet Halley UK Coordinating Committee.

Philosophy point

Sir, - May I add a small further point to Alan Wilson's "Adding a degree of subtlety" (*THES*, March 23) and its subsequent correspondence, all of which effectively turns on Martin Hollis's observation that "there is more to knowledge than information". One of the reasons that this debate has arisen at all is the single-subject nature of GCE A level which, because it is in principle *la carte*, encourages exclusiveness and fragmentariness at a crucial point in the education of the future specialist, even when a candidate's programme of study is determined by more serious considerations than what the timetable will allow or what he or she reckons to be good for a pass.

Because of its relationship to know-



Social history

Sir, - I must protest at the ridiculous review by Eric Evans of Professor Glenn's book, *Urban Workers in the Early Industrial Revolution* (*THES*, April 6). I do not take issue with what Dr Evans says about Professor Glenn's book (which I have not read), but with his contention that such revisionist studies reveal a lack of workers solidarity and limited working class political objectives in the early nineteenth century, and resurrect the paternal benevolence of the middle and upper classes, on the basis of what happened in early nineteenth-century Stockport or wherever, and that these revelations.

"well and truly un-make" the English working class and discredit Edward Thompson's seminal work. The steady accumulation of such allegedly "irrefragable evidence" altogether lacks the scope of Thompson's infinitely wider vision, which established a whole new approach to English social history. Despite the wishes of the conservative revisionists, this approach is not discredited. Their hopeful hammering on the coffin can be more accurately described as piling blows upon the ent.

Yours faithfully,
ROGER FIELDHOUSE,
Department of Adult and Continuing Education,
University of Leeds.

and ILEA back in the 1950s. This initiative resulted in the opening in 1970 of a purpose designed building near Baker Street Station to provide for the development of a unique programme of education concerned with the built environment, embracing the inter-related areas of architecture, building, civil engineering, planning, surveying and transport.

The Faculty of the Environment at PCL is most certainly on the map!

ledge, and consequently to questions of method and purpose, philosophy is well placed not only to enhance individual subjects but also to mitigate a general weakness of post-O level education. It is therefore to be hoped that full advantage will be taken of the two A level philosophy syllabuses already either available or in the process of becoming so. Associated Examining Board and Joint Matriculation Board, particularly by those whose job it is to arrange sixth form and college curricula, as well as future initiatives in A level philosophy. Unless a determined beginning is made, inadequate resources and other difficulties Dr W. D. Robins rightly draws attention to will keep doing nothing.

Yours faithfully,
Dr COLIN BUTLER,
Borden Grammar School.

Universities 'need to fix own fees'

by Paul Flather

Universities should be free to fix their own fees and to advertise while students should have to pay their own way with loans and earnings, according to a radical right-wing programme published this week calling for the complete privatization of state education.

Professor Patrick Minford, professor of economics at Liverpool University, a leading monetarist and an occasional adviser to the Prime Minister, estimates that public expenditure would be cut by almost £16 billion by 1990 if all schools and higher education institutions were sold off.

He argues in a 25,000 word study published by the strongly pro-market Institute of Economic Affairs, that reductions in "wasteful" public spending, tax cuts, and greater work incentives would overall save the Government £43 billion by 1990, increase output by 10 per cent, and reduce unemployment by 2.5 million.

Professor Minford believes state provision given as "free" services or with "hidden subsidies" is inefficient and imposes costs on society. As higher education yields a return to graduates who are able to sell their skills in the market place, there is no case for any general subsidy, he argues.

Universities should be forced to compete on price for students' registration. This in turn would lower costs, increase efficiency in teaching and produce a better allocation of resources between subjects, he says. A system of student loans would be

introduced and students would have to make up their costs through working in holidays or by savings. Students would also work harder in the knowledge that their own resources were at stake, he says.

But even Professor Minford admitted that the free market might lead to the demise, even the elimination, of certain non-vocational subjects such as English or classics. In such a case he said he would expect "profit-earning" vocational subjects such as law to be used to cross-subsidize "prestige" subjects such as classics.

He was also questioned about whether such a system would discourage poor people from going to university. He replied that as the disposable income of the poor would increase by 15 to 25 per cent there would be more money to spend on university education.

"But if poor children are not being sent to university, or certain subjects are withering away it would be perfectly justified to have a specifically targeted subsidy to help," he said.

Overall, Professor Minford proposes a negative income tax to help the poor, allowing them to choose exactly how they would spend their money. But as school education was desirable everyone would have to provide education receipts.

Professor Minford's work, hotly contested by fellow economists in recent years, demonstrates just how far the debate on public spending has now gone. Even five years ago such proposals effectively dismantling the welfare state would have been unthinkable.



THE EXTERMINENT WAS TOO MUCH FOR HIM. SOMEONE TOOK OUT A BOOK.

Left on the shelf

One book in seven at Southampton University library and almost one in 10 at Sussex bought between 1969 and 1973 had never been borrowed when a survey was conducted for the University Grants Committee.

Some details from the survey were revealed in a speech by Professor Keith Clayton, chairman of the UGC's steering group on library research, to the university, college and research section of the Library Association. The study was carried out by librarians at the two universities and presented to the steering group in 1982.

At Southampton, 27 per cent of the pre-1969 stock had been unused over 10 years, while the equivalent figure for Sussex was 11 per cent. The contrast was partly attributed to Southampton's "more traditional policy" on foreign language material, more than a fifth of which was unused in the last period.

Borrowing rates for foreign languages, physics and chemistry stock at Southampton were only 0.5 per cent per volume over 10 years. Professor Clayton said that the survey left the impression that some of Southampton's stock, at least in English literature, might be an inactive embarrassment even in the type of store for discarded books advocated in the Atkinson report.

He added that such studies showed the importance of spending university library grants sensibly, no matter what their size.

Employers' scheme launched

by Patricia Santinelli

A new £1.3m adult education pilot programme under which universities and colleges will help local employers to look at their skill needs has been launched by the Government.

The programme, which was announced by Mr Peter Morrison, minister of state for employment, is to be run by the Department of Education and the Manpower Services Commission as part of the Government's strategy for adult training which was outlined in the White Paper *Training for Jobs* in January.

Under the scheme, over 80 local collaborative projects (LCPs) will be supported during 1984/85. In England the programme will be managed in conjunction with the Department of Education and Science's Professional Information and Commercial Updating (PICKUP) programme.

Speaking about the scheme, Sir Keith Joseph, Secretary of State for Education, said that the programme would build on the experience of local collaboration gained during the progress of PICKUP. "This joint initiative demonstrates our commitment and that of the education service to working with industry to improve provision for updating," he said.

A typical example of collaboration would involve a group of engineering companies working with a local polytechnic to investigate the need for robotics training and preparing suitable courses.

Financial support, which is available for only one year and does not include the cost of training, will be of two types. The first will involve small scale support of up to £15,000 for around 70 projects which will build on existing collaboration between employers and providers of training in a particular area.

The second will involve larger scale support for about 15 projects with funding of up to £50,000 each. These will aim to forge new employer-trainer links in specified geographical areas, and perhaps within a particular industry or group of firms in that area.

Speaking about the programme, Mr David Young, chairman of the MSC, said: "If British industry is to maintain and improve competitiveness, it is vital that employers should work closely with training providers so that the training they offer is flexible and relevant. This can only happen if there is effective collaboration at local level."

Moray House head claims bias

by Olga Wojtas
Scottish Correspondent

The principal of Moray House College of Education in Edinburgh has accused the Government of bias towards the west of Scotland in allocating secondary teacher training intakes.

Moray House's share of the 560 places distributed among six colleges is 40, a fall of 3 per cent from last year, while Glasgow's Jordanhill College has an intake of 245.

"I don't think justice has been done," said principal Mr Gordon Kirk. "The argument is put that since the most serious shortage of teachers is in the west, that's where secondary intake should be concentrated at Jordanhill. Dr Bone said the colleges could take some satisfaction from the fact that the Secretary of State for Scotland had increased initially proposed intake figures from 500 to 560."

Mr Kirk said he was concerned by the cut nationally in secondary intake of a third from last year's figures of 875. "It's bad enough if the distribution is equitable," he said. "But when it's not, it's even grimmer." Dr Tom Bone, principal of Jordanhill, has refused to comment on his own college's secondary intake.

There was a skirmish between Mr Kirk and Dr Bone at last month's General Teaching Council meeting. Mr Kirk felt the GTC's supply committee, chaired by Dr Bone, was urging the Scottish Education Department to consider evidence that Strathclyde suffered more teacher wastage than elsewhere.

Mr Kirk claimed this was tantamount to saying secondary teacher training should be concentrated at Jordanhill. Dr Bone said the colleges could take some satisfaction from the fact that the Secretary of State for Scotland had increased initially proposed intake figures from 500 to 560.

When consultative figures were put out, most people felt a change was unlikely and it was "reasonably significant" that the GTC, colleges and local authorities had persuaded the Scottish Secretary to make any increase.

Considerable pressure was being put on the schools with curriculum and examination changes, said Dr Bone. "It would be quite intolerable if there were risks of shortage in a few years' time and the increase slightly diminishes such a risk."

But Mr Bob Beattie, deputy general secretary of the Educational Institute of Scotland, said more teachers were needed to cope with the reforms. "Once again the whole bloody thing is going to be done on a shoestring," he said. "Most of the work is being done after hours on kitchen tables and not in properly organized in-service development. In schools you need the vibrance and enthusiasm of young people, but the young teacher is going to become rarer and rarer."

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Vision of the future: Labour Party leader Mr Neil Kinnock peers at a microchip during a visit last week to the department of electronics and information engineering at Southampton University. He wrote a white oversuit given to visitors to avoid contamination of the microworld.

Drama boost for Glasgow

An anonymous donation and a new blood post will give a considerable boost to teaching and research in Glasgow University's drama department.

The anonymous donation of £75,000, which will be matched by the court, will establish Glasgow's first full appointment to film and television studies. Present staff have either been redeployed or work part time.

The new appointment comes as Glasgow and Strathclyde universities are about to begin honours teaching in their new joint honours film and television degree.

Glasgow has also won a new blood post in twentieth century Scottish theatre and intends to introduce a first year course in the subject. It is the only Scottish university where drama is studied as an autonomous discipline and the university says it is essential that students are aware of contemporary Scottish theatre movements.

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Train lecturers, says student president

More money must be spent on training lecturers, the president of the National Union of Students, Mr Neil Stewart said this week.

Opening the National Union of Students Easter conference in Hull, he challenged Sir Keith Joseph, Secretary of State for Education and Science to put his money where his mouth was on standards and invest in proper lecturer training.

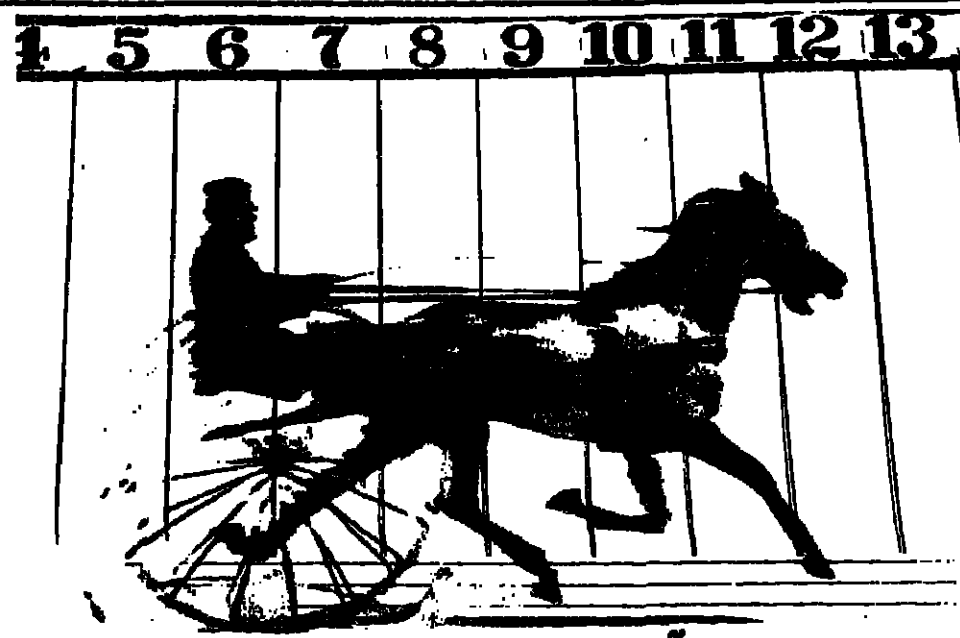
Mr Stewart said: "Our lecturers know their subjects, their PhDs testify

to that, but can they teach students? Can they maintain the standards of teaching under such cuts without proper training?"

"We believe not and notice that the 30 polytechnics have 100 staff working full-time on lecturer training while the 45 universities, to their shame, have only about 30."

Throughout the higher education system staff were demoralized

Lift-off: this picture of a horse at a brisk trot convinced the Victorians that the animal can raise all four hooves off the ground at once. It is one of 100 classic scientific photographs in a London Science Museum exhibition. The exhibition displays images invisible to the unaided eye, including Röntgen's first X-ray of a human hand, the earliest colour photo of a fetus in the womb and processed images from deep space.



Deans challenge science shift

by Paul Flatler

University arts and social science deans from all over the country this week agreed an 11-point declaration which sets out to challenge Government policy that more resources should be switched from their disciplines to boost science and technology research and teaching.

More than 100 senior university staff – including 30 professors – agreed at a conference at Leeds University to form a new standing committee dedicated to defending, exploring and articulating the interests of the arts and social sciences in higher education.

"No healthy society can exist without the critical study of culture and society as carried out through arts and

social science disciplines," they say in the declaration, which implies that no further shift in resources from their disciplines should take place.

"They go on to attack the 'narrow' definitions of vocational and technological relevance used by the Government to justify support for science and technology, and claim instead there is a strong case for expanding provision in arts and social sciences.

To dismantle the arts and social sciences, which provide broader vocational training in analytical, critical and expository skills actively sought by employers, is both 'shortsighted and foolish', they continue.

The deans end by saying they are fully conscious of the economic diffi-

culties faced by the country and the many other proper claims on public funds. But their stated requirements for their facilities, universities, and higher education, 'generally represent the very minimum called for by the national interest.'

A toughly-worded letter has already been sent to the University Grants Committee 'great debate' signed by 50 deans, their equivalents, and other senior staff, outlining a defence of the arts and social sciences.

In that letter the deans cite evidence contained in the Levenshulme study into higher education which shows that the number of UK science and technology students on degree courses is already close to 40 per cent, compared to between 20 and 30 per cent in other West European nations.

Mr Martin Milligan, dean of the arts at Leeds, who called the meeting on behalf of his faculty, said there was much common ground in the 'special dangers' now faced by both the arts and social sciences.

He told the conference in future a fuller and more precise case for our disciplines must be made. Afterwards he said he had been very pleased by the response of universities to the Leeds initiative. No one else would speak for the arts and social sciences, so the faculties had to do the job, he said.

During the day there was considerable debate about the wording of the declaration, about the value of the disciplines and of research, and the nature, duration and character of current degree courses. Links with polytechnics and colleges are to be made before a second conference is fixed.

Dr Steve Giles of Nottingham University claimed that employers on the Continent were beginning to discriminate against UK graduates because they had done only three-year degrees.

Professor Martin Wheeler, dean of arts at Queen's, Belfast, however injected a note of realism, pointing out that the Government was in fact poised to strip Northern Ireland institutions of four year degrees, not to bring in longer courses everywhere else.

NAB is best for long-term planning, says Sir Keith

The Government believes that on the evidence of its achievements to date the National Advisory Body represents the best basis for developing long-term planning machinery for public sector higher education, Sir Keith Joseph, Secretary of State for Education and Science, said last week.

Sir Keith was announcing the publication of a consultative document on the future of the NAB in a written reply to a parliamentary question. He proposed, subject to the outcome of the consultative exercise, to make the body permanent at the end of its interim life next year.

Because of the addition of the voluntary colleges, Sir Keith proposes to change the NAB's name to the National Advisory Body for Public Sector Higher Education. The colleges' voice in discussions with the NAB, to be known as the Voluntary Sector Consultative Council, will be established later this year.

The extension of the NAB's remit to cover the direct grant colleges is to be kept under review. The consultative paper raises the possibility of the three agricultural colleges – Harper Adams, Solihull, and Shrewsbury – joining in February 1985, when the permanent body comes into operation. Others under consideration are the Royal Academy of Music, the Royal

College of Music and the Royal College of Nursing.

Capital expenditure, which is not explicitly included in the NAB's present terms of reference, would come under its remit if Sir Keith's proposals are accepted. But no solution is put forward to the problem of giving the body a separate legal entity. Up to now, the body has been funded through the Inner London Education Authority's advanced further education pool allocation, but it is accepted that this causes practical problems which will be exacerbated by the inclusion of the voluntary colleges.

The AFE pool can only be used to make payments to local authorities, which causes difficulties in giving the NAB its own legal identity. Discussions are to continue between the DES and the local authorities to find a new funding mechanism.

No significant changes to the structure of the body are proposed, apart from the addition of observers on the committee to represent the voluntary colleges. Sir Keith does not propose to alter the method of appointing board members or to extend further representation on the committee. His only concern here is to keep the board, which now has 29 members, from reaching an unwieldy size.

Gwent renews bid to raise hours

Gwent County Council has renewed its attempt to persuade 400 college lecturers to accept longer teaching hours.

A new appeal from director of education Mr Hugh Louden to staff on the Lecturer 1 and Lecturer 2 scales in the colleges was sent out at the end of last week, just as the National Association of Teachers in Further and Higher Education returned more than 300 unsigned contracts to the county council offices in Cwmbran.

The letter sets out the authority's case for terminating existing contracts for the 400 and offering reemployment with two hours extra class contact for L2s and one extra hour for L1s.

And it seeks to scotch suggestions that Gwent was moving towards a worsening of conditions of service.

"This is rubbish. Gwent has no intention of going outside the limits set in the national agreement," Mr Louden says.

Union officers in the country say that the timing of Mr Louden's letter has entrenched the position of Nefthe members who had already returned their contracts unsigned, and would make others more likely to follow their union's instruction to do so.

Polys 'may be freed from local controls'

by Karen Gold

Polytechnics may have to accept central government controls but they could be freed of some local ones in return, said Mr David Forrester, assistant secretary at the Department of Education and Science in a stick-and-carrot speech at the Association of Polytechnic Administrators conference.

There was a silver lining of specific plans in the DES to enable this, he said.

"What I am suggesting is that local freedom of responsibility and relatively independent major institution are quite compatible with the sort of central planning and control which is likely to be with us hereafter, within the climate of financial restraint and overall reductions in student number in the 1990s," he said.

Central restrictions in recent years included the National Advisory Body's control of programme areas and modes and student number targets; the restriction on overall spending; the use of performance indicators such as staff/student ratios; and increasing interest in what happened in the classroom, indicated by the increase in HM Inspectors; and the recently announced standards inquiry chaired by Sir Norman Lindop.

But the local authority controls had also continued, he said. "We have local authorities still applying their detailed controls by for example not allowing extra non-academic staff to allow you to meet student targets, or by applying non-redundancy clauses."

Plans in the DES to relieve polytechnics of their local burdens included the recently issued Government paper on allowing them to run commercial activities, for which responses were requested by the end of April, he said. There were also plans to mitigate the NAB student number

controls by relaxing DES restrictions on course approvals, which might take place by 1986.

Administrators and others should tell the department what non-legislative measures were needed to make polytechnics more independent, whether they were changes to local authority financial regulations, to instruments and articles of governance, and to the conditions of service of staff.

The message of the Coopers & Lybrand (management consultants) report to Kingston is that the polytechnic should be allowed to bid after itself and to get on with it, he said.

"What I would say is that you are finding you are pushing at an open door, you start to press the case over the next year or so."

Mr Forrester said that the DES expected the Lindop inquiry into public sector validation and standards to seek to:

- set out some principles on the relationship between external validating bodies and institutions;
- differentiate between institutions according to their maturity;
- allow for change in the system, to want greater freedom for some institutions, but selectively perhaps more external control for others;
- introduce probably tighter arrangements for external examinations, which would also apply to the universities;
- give advice to institutions about their internal processes.

to act them in relating if you like the problem as specified in a package by the Council for National Academic Awards, to the product as defined, the process of delivery as seen by the Inspectorate or anyone else, and the product as outcome, the final examination and experience the student takes away."

Administrators flock to get away from it all

by Peter Scott

Sheffield in 1981, Coventry in 1982, Hatfield in 1983 and last week Bristol – the sequence of the first four conferences of the Association of Polytechnic Administrators shows that although it may not yet have quite arrived the association is travelling hopefully.

For an association that is not yet five years old the APA has generated remarkable momentum and respect. The Bristol conference was attended by 250 administrators, 70 per cent of the association's growing membership. Although the APA's centre of gravity remains firmly in academic registries, a significant diversification of its membership seems to be under way. More finance, personnel and other non-registry administrators came to Bristol than ever before.

This may reflect an interesting shift in the balance of polytechnic administration. Until recently it circled round two poles – a detailed bureaucratic relationship with maintaining local authorities that was essentially financial and an equally detailed relationship with the Council for National Academic Awards and other validators that was concerned with course approval.

Both are still central to the preoccupations of polytechnic administrators. But with local authorities coming under increasing pressure to adopt a 'hands-off' policy towards their polytechnics and the CNAA being authoritatively encouraged to develop a genuine arms-length partnership with its institutions both may be destined to decline in relative importance.

The new, and highly magnetic, pole is the National Advisory Body. The role of the NAB now obsesses APA conferences as much as it shapes the agenda of polytechnic administrators. The package of policy concerns stimulated by the creation of the NAB has given not only a focus, but also a boost to the association.

So there was something symbolically emblematic that this year's main speaker, Mr David Forrester, was able to announce at an APA conference that the NAB was to be made a permanent body, only a short while after the formal announcement had been made to Parliament.

Mr Forrester is a rising Department of Education and Science and servant and chairman of the NAB's key technical and data group. The theme of his APA speech was the balance between national, DES as well as NAB, policy initiatives and traditional local authority control, with the clear inference that the latter should be scaled down as the former built up.

It provoked lively discussion and even dissent (not going to the point) quite unlike the rather staid, even silent, deference with which their university colleagues received the chairman of the University Grants Committee a week before in Liverpool.

In general the APA conference at Bristol had a much higher profile than the Conference of University Administrators' meeting in Liverpool. Less emphasis on training workshops, packed sessions on the NAB and the polytechnics of the future, cancelled sessions on future buying for lack of support – these were the characteristics of the Bristol meeting.

"Getting away from it all" is a phrase that could be used to describe the conference – not in its own pejorative sense although being away from the desks and committees in the west country sunshine, but in the rather more serious sense that it provided broader perspectives on which their day-to-day work could be examined creatively and not critically.

This is important for polytechnic administrators because they have traditionally enjoyed lower status (and pay) than their university colleagues. Yet they are at the sharp end of the various forms of 'accountability' to which polytechnics are subject, to the CNAA and now the NAB.

Surrey loses contact with new satellite

by Jon Turney
Science Correspondent

Surrey University's new satellite, launched last month, has gone missing. The Surrey team will make a last-ditch effort to make contact with their spacecraft in a week or two, but prospective users of the satellite now appear unlikely to benefit from the free launch granted by the US space agency.

The satellite, UOSAT-2, was the university's second cut-price spacecraft. Ironically, the £100,000 UOSAT-1 is still working perfectly. UOSAT-2 which cost three times as much, was built in a five-month rush to meet the launch date offered by the National Aeronautics and Space Administration. The satellite, designed for amateur radio relays and use by groups in schools and colleges, was launched successfully alongside a commercial NASA payload on March 1.

UOSAT-2's systems worked as

planned for the first few Earth orbits, but then the satellite went dead. Repeated attempts to send commands to the craft, during passes over the UK, have failed and tests with sensitive receivers at Jodrell Bank have detected no signals.

The university lacks the expensive equipment for trying to provoke a response from a malfunctioning satellite. Hopes now rest with US radio amateurs who will try to reach UOSAT-2 with a powerful signal generated by a transmitter at the Stanford Research Institute in California.

If this fails, the Surrey satellite team will lose three years' work programmes for the new craft. Mr Roger Peel, a member of the group, said the worst result would be that the group might fold up after the failure. But he stressed the team would not consider the implications of the loss for a few months yet, and efforts to reactivate the satellite would continue.

Quality not quantity 'is name of game'

Concern about the quality of graduates rather than the quantity ought to be the talking point of the current debate about higher education, Sir Alex Jarrett, chancellor of Birmingham University, has said.

Sir Alex, who is heading a steering group supervising efficiency studies in the universities, was addressing a conference at Surrey University, held to celebrate the fortieth anniversary of the 1944 Education Act, and to look forward to educational provision for work and leisure during the next four decades.

Dealing with the technological changes overtaking industry, and the implications for education, Sir Alex said: "We need to recognize the need for high quality graduates. The present debate worries me. There seems to me to be a greater amount of time devoted to quantity rather than quality."

Sir Alex also emphasized the need for improved management training, and the opportunities to take advantage of distance learning techniques. There was also a need to concentrate on the acquisition of basic skills. Too



Sir Alex: worried by debate

many young people still offered themselves for work without these skills. "It is a wilful dereliction of responsibility if we have people who are not able to read and are not reasonably numerate," Sir Alex added.

His ultimate fear was not of the size of the unemployment problem, but of a hard core of people formed from the least educated and least privileged.

"When it comes to resources one has to wonder if we are devoting enough to them, do we give up on them too easily? Are we creating an untouchable group?"

Teenagers 'need urgent help'

More power should be given to central government to pave the way for a series of broadly-based educational reforms, Sir James Hamilton, the former permanent secretary at the Department of Education and Science, told the conference.

His prime target was the 14-18 year-old age group. Both the Youth Training Scheme and the Technical and Vocational Education Initiative would flourish better in the context of a single plan, rather than in isolation, said Sir James. "Provision in this area should be urgently and fundamentally re-examined with special attention being paid to policies of financial support for different groups of students," he added.

Education policy-makers should take account of high levels of unemployment,

which could have serious implications if they continued for a number of years. "There are two ways of looking at educational policy-making over the next 40 years," he said. "It can be based on an extrapolation of trends and experiences since 1944. Alternatively, in certain areas those responsible for educational policy-making should recognize that the demands of the twenty-first century will involve a more fundamental redefinition of the meaning of education, work and leisure."

Sir James said it was tempting to think of such reform in terms of a new Education Act, but it would be difficult to achieve the necessary political consensus. Efforts spent on such a task might also inhibit progress on much-needed shorter-term reforms.

Leith contract will help in battle

Leith Nautical College is confident that a three-year contract from the Manpower Services Commission will strengthen its fight to retain central institution status.

The Secretary of State for Scotland has proposed that Leith should be transferred from the control of the Scottish Education Department to be run by Lothian Regional Council. Leith argues that it is a national, not a regional college, and should therefore continue to be centrally run.

Leith has now won a contract worth more than £650,000 from the MSC, initially for three years to develop open learning programmes for working in maritime and offshore industries.

The college has already produced programmes for Britoil and BP in instrumentation and control systems on offshore platforms, and the new contract will enable this work to be developed along with courses in maritime studies, offshore communications and the handling of hazardous cargoes.

Dr Alan Watson, Leith's principal, said: "This confirms that our work is national, and adds strength to our hazardous cargo courses which are international."

There were fears that if Leith were transferred to Lothian it was likely to become a non-specialist further education college. These were heightened by a nautical education review carried out by a joint working party of officials from the Scottish Education Department and the Convention of Scottish Local Authorities, which concluded there was a 'powerful logic' in having only the Scottish nautical education centre instead of the present four.

It has been generally felt that if the recommendation were implemented, the survivor would be Glasgow College of Nautical Studies, the largest college in the country.

Status 'must be defended'

by Karen Gold

A properly-established forum to bring together the interests of the university and non-university sectors of higher education should be set up as a matter of urgency to cover matters raised in the UGC debate, according to the Council for National Academic Awards.

But it warns that any new transitory policies should be watched in case they endanger the status of the public sector. "CNA would not be willing to lend its support to any proposal which might have the effect of lowering the status of public sector institutions compared to that of the universities," its paper says.

There was an urgent need for a collaborative study on unit costs in two sectors, and eventually for a standard unit of resource at least to cover teaching costs. "The basic unit of resource would need to be sufficient to enable staff to engage in at least the minimum level of research and other comparable activities necessary to sustain their teaching function," the CNA says.

The CNA supports concentration without diminishing access and closer collaboration between institutions, although the paper says in the case of mergers it must be clear the academic and financial benefits outweigh the upheaval of merger.

The differentiation between universities as 'academic' and the public sector as 'vocational' is misleading, the paper says. The differences between the two sectors lie much more in the comprehensive provision in the public sector.

"The CNA believes it is a mistake to think in terms of trying to identify some school-leavers as being suitable for university-type education and other school-leavers as being suitable for other types of higher education," the paper says.

"Given the many excellent courses offered by public sector institutions the CNA considers it unfortunate that there is still a tendency for the most able students to be automatically encouraged to apply for a university course as their first choice."

Nationalists call for Scottish subcommittee

by Olga Wojtas

Scottish Correspondent
The Scottish National Party has called for immediate establishment of a Scottish subcommittee of the UGC as the first step towards a Scottish UGC.

The UGC's questions fall to take account of Scotland's different educational system and show "a lack of understanding and clarity of thinking unexpected in a document of this potential significance."

For some years, says the SNP, English educationists have expressed disillusionment with the early specialisation of A levels and have looked towards the broad based systems of Europe and Scotland.

"It is the English model which is out of step with European experience and yet the assumption persists that English practice is somehow 'normal' and everything else aberrant."

It is dangerous to attempt to adopt practices from elsewhere without considering the overall pattern of educational provision, warns the SNP, adding: "It is a nonsense to suggest that A levels plus a two year general degree is equivalent to higher grades plus a three year ordinary degree in a Scottish university."

In Scotland, the universities have traditionally played a more important role within higher education than in England, says the SNP, "this is not because the age participation rate is appreciably higher but is a matter of a structural difference with many students who would enter a polytechnic in England instead of entering a university to study for a broadly based ordinary degree."

A separate body representing the Scottish universities could cooperate with the representatives of other sectors.



UGC condemned as 'mouthpiece'

by Ngaio Crequer

The University Grants Committee has become the Government's mouthpiece, implementing cuts without dissent, giving no justification for bias in grant allocations, making crucial decisions on inaccurate and inadequate information, and being accountable to no one, says the Association of University Teachers.

The union says the UGC is no longer working in its terms of reference, failing to represent "the needs of university education" to the Government, and not ensuring that "universities are adequate to national needs". The AUT reaffirms its policy that a Universities' Council, with an academic and policy committee, should be established in its place.

The AUT says the UGC questions are narrow and trivialize the scope of the debate by preempting discussion of legitimate alternatives. Referring to the thousands of students denied places, and the one in six staff who have left, they are dismayed and angry at the way "this vital national asset is being thoughtlessly squandered."

It would be "ludicrous" to think the quality of education could be maintained with the further cuts contemplated. They would "destroy the international currency of our three year degree, the strain on human and physical resources would be intolerable; the dual support system for research would be destroyed, totally undermining the already hard hit research effort, and our universities would be utterly discredited as viable institutions for learning and research."

The AUT says it is misleading the way "research" had become inextricably linked with science and technology. The humanities have become the Cinderella of the universities. "To give them equal treatment with other subjects areas there was a strong case for a

Easter is... (for some members of the University Grants Committee) reading responses to 'the great debate'. Here we report a further selection.



AUT general secretary Diana Warwick

properly funded Humanities Research Council.

"The union 'deplores the attempts to distinguish between scholarship and research as if it were possible to have a university that does no research but is allowed a cheap substitute called scholarship. The quality of British university degrees is not sustainable unless properly backed up and informed by research.'

In answer to the UGC question whether there was quantitative evidence that the cuts had hit research more than teaching, "the departure of thousands of academic staff constitutes a loss to both."

"The most shocking omission in the UGC questionnaire is the complete absence of any mention of the likely future needs of the economy."

Although there were increasing demands for graduates in electrical engineering, mathematics and computing sciences, the 1981 cuts would reduce supply. There would be other shortages, in chemical engineering, science teachers, and a brain drain of biotechnologists.

INFORMATION TECHNOLOGY

In March of this year, *The Times Higher Education Supplement* published a special feature on Information Technology. It included articles on digital drawing-boards, geographical data sifting, computer tutors and current applications of desk-top terminals.

Copies of this feature are now available in reprint form at a cost of 25p each. Please send cheques/postal orders (no cash please) made payable to Times Newspapers Limited to:

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Special education courses 'should go'

by Patricia Santinelli

Proposals to phase out all special education initial teacher training courses by 1986, including a unique course at Manchester University, have been made by a special working group of the Government's advisory body on teacher training.

The group says in its draft report, presented to the Advisory Committee for the Supply and Education of Teachers' sub-committee on teacher training, that staff training students to teach children with severe learning difficulties should instead be deployed to in-service courses and contribute to "awareness" courses in general teacher training courses.

The group wants the existing range of in-service courses in this field to be rationalized and expanded with the aim of ensuring that all staff who have some specific responsibility for pupils and students with special educational needs should receive post experience training appropriate to their function.

It also recommends that the allocation of resources to teacher training institutions and other providers of in-service training should take into account the high priority of training for special education needs.

In addition, the group urges the setting of appropriate staff development programmes within training institutions to ensure that all initial teacher training courses include elements on special education in accordance with the Secretary of State for Education's criteria.

The group was set up at the special request of Sir Keith Joseph to review and report on all existing provisions for the training of teachers in this field, the content of courses and the implications for further education.

In its report, the group says that there is no doubt that specialist training courses have so far been able to attract highly motivated candidates and that their successful students have contributed to a general raising of

teaching standards during the 1970s in schools for children with severe learning difficulties.

"However, there is no longer the same urgent need to increase the proportion of trained teachers in such schools. By January 1983 less than 3 per cent of the teachers in schools then classified as ESN (M) or ESN (S) lacked a recognized teaching qualification of some kind. The issue now is whether the teacher force in such schools is appropriately prepared to meet the needs of pupils," it says.

It adds that in the future, the population of all special schools is likely to contain an increasing proportion of the profoundly and/or multiple handicapped, for whom a carefully tailored programme of education and care will be required.

"It would, in our view, be quite inappropriate for courses of initial training leading to qualified teacher status to concentrate on producing teachers for this highly specialist and

very limited field of employment. It appears that there is already some concern among teachers who underwent such training and now feel at a disadvantage when it comes to competing for senior posts," the group says.

Similarly in its assessment of Manchester University's four year-degree course combining the study of audiology, two other academic subjects with a course of teacher training and a specialist course for the teaching of the deaf, the group says it does not believe their graduates will be well placed to compete for posts with teachers with experience of the full range of pupils and a post experience qualification in the teaching of the deaf.

In its recommendations for further education, the group says all such teachers should receive some training in the recognition and handling of special needs whether in the setting of an initial training course or by means of in-house training.

Variety in lecturers' birth leave

by David Jobbins

Wide variations in maternity leave for academics at British universities are apparent from preliminary results of a survey conducted by the lecturers' union.

Leave on full pay ranges from one to four weeks to six months, with most institutions clustered at eight, 12 or 16 weeks. On half pay, entitlement is between six and 16 weeks, while unpaid leave can be as little as a few weeks or up to two years.

Most of the 46 institutions, including the London University colleges, are more generous than the statutory minimum required under the Employment Protection Act, which demands a two years' service and allows for at least two weeks' leave at full pay and a maximum of 40 weeks off work.

Nearly all agreements expect only 10 months' service for academic staff, although part-time staff, contract researchers and other groups may have two or three instances need up to five years' service.

Only Leicester and King's College Hospital Medical School offer 16 weeks on full pay after a year.

Thirteen have eight weeks on full pay, nine 12 weeks, and 12 have 16 weeks. The longest, 24 months, is available at Aston and Bristol universities. For unpaid leave, the shortest is five weeks and the longest, at Sussex, is two years.

In London University most colleges had a package of eight weeks on full pay, 16 on half pay and 16 unpaid. The best deal for teaching staff is at Ave with six months, six months and 10 months.

The Association of University Teachers is refining the survey and hopes to use its findings as the basis for a concerted push on parental leave later in the year.

The preliminary findings were circulated to delegates to the AUT's annual women's meeting in London last week. Delegates voted firmly for immediate consideration by the AUT leadership of a national women's officer. A motion regretting the failure to do so was carried convincingly, despite an attempt by the women's committee to refer it back for further consideration.

They also called for constitutional changes which would allow advisory committees such as the women's sub-committee and others covering research, library, administrative and other issues to submit motions direct to the council without having to go through local associations which, it was suggested, might not be sympathetic to sectional demands.

The conference called for the AUT to adopt a policy of positive action in favour of women in branches in direct response to the gender inequalities inherent in the "new blood" posts, and adopted a code of practice for equal opportunities for women in universities.

Deficit may force AUT rise

by David Jobbins

A large rise in subscriptions to the university lecturers' union is being recommended by leaders aiming to offset a growing deficit.

Delegates to the May council of the Association of University Teachers will be asked to back a 29 per cent increase in subscriptions from £28.80 to £37.20 a year.

With falling membership the union is already anticipating a shortfall of about £165,000 on projected costs of £1m for 1984/85.

Last December its council in Hull voted for the appointment of a fourth assistant general secretary based at the union's London headquarters. Given this decision the total deficit is calculated to be up to £205,000. But the proposed subscription increase would cover these additional costs and add £25,000 to the union's reserves.

The union faces declining membership while demands on its services continue to grow. Its treasurer, Dr Tom Halsall, says that it was possible to keep subscriptions stable in real terms from 1939 to 1981 at about 30 per cent of the bottom point of the lecturer scale because membership was growing.

Then from 1981 onwards, just as demands on the association grew rapidly because of the impact of Government policies, subscriptions increased from £16.80 to £25.20 and then to £28.80 in 1983.

The new rates would represent about 0.5 per cent of the bottom of the lecturer scale.

But the increase will only partly offset the extra cost of employing a fourth regional official, a step which is likely to be announced shortly by the AUT leadership in a bid to avoid a repetition of the damaging debate which began at last December's council over whether new senior appointments should be at the union's London headquarters or in the regions.

Then it was finally decided that a fourth assistant general secretary should be appointed, and shortlisting took place last week with an announcement possible before next month's council in Manchester.

But union leaders are conscious that demands from regions without their own officials, unlike the north-west, Scotland and London, will not go away and are expected to confirm plans to appoint a fourth regional officer, possibly to cover the Midlands and Wales, from next year.

Rough estimates of the cost are about £40,000 a year, and if the AUT goes ahead, there will be inevitable pressure for another subscription rise especially if membership continues to fall.

Efforts to recruit contract researchers and administrators, areas where the AUT is weak, are likely to be redoubled and the union has launched a campaign to abolish waiver clauses which restrict the right of many research staff on fixed term contracts to redundancy pay and protection from unfair dismissal.

Australian air fare battle

by Karen Gold

An Australian professor who flew to Liverpool for a final interview for Liverpool Polytechnic's rectorship had to battle with the city council before his £1,600 expenses were reimbursed.

Professor Jarlath Ronayne, executive dean of the Faculty of Arts at the University of New South Wales, flew from Sydney to England on March 20 to be one of six people on the short-list for the polytechnic rectorship. Before he left, a polytechnic administrative officer had assured him on the telephone that his expenses would be paid.

But 10 minutes before his interview with the polytechnic selection committee on March 21, he was told by the same officer that the city treasurer had refused to sign the cheque.

The officer told me the treasurer didn't believe that polytechnic government had the authority to incur that amount of interview expenses," Professor Ronayne said. During the interview that followed, he added, the city's education officer Mr Kenneth Antcliff

Teaching standards attacked

by Owen Surridge

University teachers came in for some tart criticism in London last week during a symposium on the expectations of higher education in the next century. The meeting was the fourth in a series arranged by the British Association for the Advancement of Science.

Most forthright of the critics was Sir Peter Swinnerton-Dyer, chairman of the University Grants Committee, who said that technically hopeless teachers were no kind of advertisement for universities. "I am sure university teachers ought to go through an induction course. A lot of them teach badly because they know no better. No university teacher has an excuse for dropping below a decent 2:1 standard but a lot do. Not because they do not know any better but simply because they cannot be bothered. No training can overcome that. Failure to carry out the duties of office should be met with dismissal."

Another critic was John Bevan, secretary of the National Advisory Body, who charged universities with avoiding the whole idea of training teachers. "It is not wanted nor being attempted," he said. That teacher training was needed was admitted by Malcolm Fraser, University of East Anglia, who said it was not so much the quality of performance that mattered as the quality of the teacher who saw his subject in context with others rather than in isolation.

The idea that nothing was being done was contradicted by Sir Clifford

Butler, vice chancellor of Loughborough University of Technology, who said: "There are a lot of short courses around." The real problem lay in the judging of teachers, and research was needed to establish appropriate criteria. Diana Warwick, secretary of the Association of University Teachers, rejected the idea that most university teachers were inadequate but said her own association would welcome development of training schemes and proper criteria for the judgment of teaching. Many teachers believed research was the key to promotion rather than the quality of teaching.

These exchanges were prominent in an otherwise staid discussion which touched on such matters as competitive tendering for course design regarded as increasingly indecent by some but as a small-scale practical reality by Sir Clifford Butler, who said: "I have done it in response to a conference challenge and the course is now on offer" - an unpopular plea for teachers to receive management training and a complaint that universities were creating status consciousness in sixth forms through a narrow selection of studies.

Cuts and the possible effects on resources drew their measure of shot. Sir Frederick Dainton, chairman of the British Library, put in a plea for more help for ordinary undergraduates with difficulty. Sir Peter Swinnerton-Dyer said his concern lay with young people at school: "The reason many young people do not go on to university is

often due to making wrong choices at 16," he said.

Professor Paul Black, of Chelsea College, voiced concern about the status of teacher education, which he held to be in low public esteem and at the bottom of the academic pecking order. He said the blame lay in part with a society which was asking too much of teachers and in part with those in higher education who trained teachers without assessing either society's needs or the needs of school.

As a consequence few subject teachers understood how their specialism fitted in with the general aims of their schools, and their understanding of what learning and education was all about was sadly inhibited by the influence on their training of an entrenched academic elite. It was time, he said, for those in higher education to ask questions about the broader needs of teachers and graduates in years to come. "As yet no such questions are being asked," he said, "and higher education is not responding in the right way. Unless higher education does change, seriously, it will fail to develop ideas as to how teachers should teach."

Sheila Browne, principal of Newnham College, Cambridge, said resources must be found to give larger initial training courses for intending teachers and for subsequent in-service training throughout their career. She said there was a need for more links between those who trained teachers and other academics. "Higher education has much more to give education than it currently does," she said, "and it is time it did more to help schools."

Law and order faces investigation

Public concern over current methods of dealing with crime and criminals has prompted a new £730,000 research programme involving investigations of the role of the police, courts, prisons, probationary services and ways of rehabilitating offenders.

Academic researchers in the field have just been invited to apply for grants under the programme backed by the Economic and Social Research Council, which will spend £650,000 over the next four years; the Department of Health and Social Security, and the Home Office, will each spend £40,000.

The programme follows a belief that many of the new prison schemes of the 1960s appear to have failed in rehabilitating offenders. A new debate over the issue of "human containment" has been sparked off and the ESRC is now keen to back applied studies in different fields of criminological research.

Such a programme was first discussed in the late 1970s, but it was only in 1982 when the council arranged a conference on law and order that firm priorities were agreed.

The five main themes will be: the criminal justice system, looking at juvenile delinquency, links between police, courts and probation officers, custody rules and prisons; discretion in law looking at charging and prosecution of offenders, trial, and sentencing; police accountability looking at the role of local authorities and consultative committees; the media and its influence on public perceptions of crime; and the study of "criminal careers", from juvenile to adult offender, and from amateur to professional, plus study of crime and urban decline, and crime and ethnic minorities.

Applications will be judged by a new sub-committee on crime and criminal justice under Sir Arthur Peterson, former head of the Home Office and a member of the Royal Commission on Criminal Procedure.

Taylor to head teacher council

Dr William Taylor, principal of London University, is to chair the newly established Council for the Accreditation of Teacher Education. The membership will be drawn mainly from practising school teachers, teacher trainers, elected members and officers of local education authorities.

Sir Keith Joseph, Secretary of State for Education and Science, announced his decision to go ahead with his plans for the council in the Commons last week. Details of its membership will be announced shortly and the council will then start work as soon as possible.

A greater set of new arrangements for the approval of teacher training courses and outlined the framework within which the CATE will operate. It will review all initial teacher training courses in England and Wales and advise on proposals for new courses, assessing whether they conform to new criteria concerned with professional, rather than academic, content.

Scots claim lack of TVEI control

Scotland's largest teaching union, the Educational Institute of Scotland, has attacked the local authorities for not demanding more Scottish control of the Technical and Vocational Education Initiative.

EIS general secretary Mr John Pollock has written to the Convention of Scottish Local Authorities, saying that when the institute discovered a Scottish steering group for TVEI was not being set up, it assumed this was because of pressure from the government or Manpower Services Commission.

However, the EIS had now discovered that COSLA had backed a national steering group augmented by two Scottish members and a Scottish Education Department adviser.

Mr Pollock says the EIS strongly opposed TVEI being introduced in Scotland until there were "absolute assurances" that projects would be compatible with educational reforms currently taking place.

"In view of the distinct differences between Scottish and English education, it appears to us to be inappropriate that the decisions on compatibility with the Scottish educational system should be taken by an English committee augmented by two Scots - however eminent."

But Mr William Livingstone, COSLA's assistant secretary, said the EIS misgivings were groundless. COSLA had been allowed to set up a TVEI advisory group, and there had been a Scottish pre-selection meeting on projects. The two Scottish members on the national steering group were Dr James Munn, chairman of the Scottish Teachers' Services Committee and a leading curriculum reformer, and Mr Frank Pignatelli, assistant director of education in Strathclyde region and chairman of the COSLA advisory committee.

Adult educators are urged to meet the challenge of change

by Maggie Richards

Should adult education keep pace with the times, or should it vigorously resist them? The question was posed to delegates attending last week's annual conference of the National Institute of Adult Continuing Education.

For the NIACE this year's conference at the University College of North Wales, Bangor, was a crucial one. It offered delegates an opportunity to discuss future strategies for the institute's new "development" unit, established by the Government to follow up the detailed research work of the now defunct Advisory Council for Adult and Continuing Education.

The keynote speaker, Mr John Brace of the Welsh Joint Education Committee, raised the issue of the conference title. "Keeping up with the times," new notions and modern methods, and urged delegates to consider if this was appropriate.

The institute's chairman, Professor Paul Fordham, took a different view. He reminded the conference that its last meeting at Bangor had been in 1973, the year of the Russell report

when adult education had seemed to be poised on the brink of a bright and expanding future.

Since then it had plunged into an abyss but he was confident of its ability to bounce back and he saw signs that this was about to happen.

He recognised there was anxiety about the institute's future role, following its acceptance of responsibility for the development unit. It was certainly not the development council the institute had hoped for, nor was it the successor to the ACACE which the advisory council had envisaged. Creation of the unit had produced fears that the institute's role as a major advisor on adult education would be undermined - that it would be diverted from this task, and succumb to political influences.

"My answer is firmly - no, this will not happen," Professor Fordham told the conference. "Adult educators are the last ones to be anxious about change, as long as they stick to their values and to what they believe in."

The institute would seek to maintain these values. It would ensure participation by all organizations involved in the development projects; insist that

the curriculum was not predetermined, but was open to negotiation; and continue to seek commitment to positive discrimination for those people not reached by adult education.

The new development unit would also need to represent views from the grass roots within adult education and respond to those views. "The new roles which have been refurbished. It is a shift in direction to meet the challenges of change," Professor Fordham said.

"We are at the beginning of more real new opportunities than at any time since the Russell report. We are trying, in looking for new roles, to develop the old roles and bring our work closer to many of the major problems our society is facing. That is the task ahead."

The establishment of the unit was also welcomed by Mr John Stradling, Welsh Office minister. "It is not the major initiative which many have looked for. But, clearly, the fact that this unit will be working within the institute adds a dimension to your activities which will be of great importance for promoting the de-



Chartered accountants Peat, Marwick, Mitchell & Co, are to fund a chair of accounting at Birmingham University.

The company takes some 50 students a year for training at its Birmingham office. Pictured at a press conference to announce the new chair are, from left to right, Mr Alastair Jones, partner, Mr John Adcock, Professor John Samuels, professor of business finance at Birmingham, and Professor Edward Marsland, vice chancellor.

School opens for business

The Open University has launched the first series of residential study weekends to accompany its latest venture, the Open Business School.

With 1,600 students enrolled on the first two courses, the OU is boasting that its business school has already become the biggest in Europe. More than 2,300 people have now applied to join.

Students taking the first programme will attend residential weekend schools at 14 locations throughout the country. These include the Civil Service College, Manchester Business

School and Bristol Polytechnic. The students include managers with little or no formal training and some who are relatively new to the management field.

The business school's first two courses are "The effective manager", which covers decision-making, planning and budgetary control, management style, and communications; and "Personnel selection and interviewing". Courses involve face-to-face tutorials in small groups and the use of distance learning techniques, as well as the residential weekends.

development of adult continuing education in England and Wales. I believe that this will be a considerable step forward," he said.

"We hope that the emphasis will be on the production of practical recommendations and programmes which are capable of implementation in the current financial and economic circumstances."

Mr Stradling Thomas also spoke of the urgent need to combine the forces of education and training. For too long there had been a tendency to separate the vocational from the educational. "What is particularly important to my mind is that there should not be any separate pieces of activity, one being regarded behind a banner headed Education and the other behind one called Training. The two activities are often inextricable at working level and to the benefit of nobody to waste time trying to sort one from the other."

"Far more relevant is that these concerned seek a genuine joint approach which recognises that they are tilling the same ground and need to do that in a coordinated way and above all with the interests of the customer primarily at heart," he added.



Must students, too, get on their bikes?

It would be an understatement to suggest that recent Government announcements on student travel costs have created an anomaly. In the past few months, the Government has taken a series of decisions which have resulted in students in receipt of funding from the Scottish Education Department continuing to have their actual travel costs reimbursed through an individual claims system while students supported by English, Welsh and Irish Education authorities will receive a uniform flat rate payment not related to actual costs incurred.

While we in Scotland are relieved that this new measure will not apply to SED award holders, we totally support the claims of our English, Welsh and Irish colleagues that they are being subjected to "rough justice". The flat rate system will severely cut the annual income of that large group of students outside Scotland currently incurring travel costs well above the flat rate payments proposed by the Government.

Survey work undertaken by the NUS points to the fact that students in other parts of the United Kingdom, most notably London, incur average travel costs as high as those faced by Scottish students. Students attending "out of town" campus universities such as Lancaster and Warwick face large daily travelling costs.

We are also bemused that the flat rate system is to be applied to Northern Ireland. At the Government's initiative, the merger between the New University of Ulster and Ulster Polytechnic has produced the multi-sited University of Ulster with sites as far apart as Belfast and Coleraine. Certain categories of students will have to travel between the two main sites. The student unions have won an agreement with the university to meet the full cost of travel for those moving between Belfast and Coleraine. A flat rate payment based on average start of term travel to the town of study is hardly an attractive prospect for the 20 per cent of students they hope to recruit from mainland UK. The Government's action on travel awards calls into question the viability of the new institution.

From north of the border we are also well placed to note some of the anomalies that will now arise. The distinction is not between Scottish and other British students but is defined by the location of the grant awarding body. The not inconsiderable band of English, Welsh and Irish students attending Scottish institutions will be on a flat rate while surrounded by SED award holders receiving full reimbursement. Conversely, the smaller group of SED students studying south of the border will have their travel fully reimbursed while the overwhelming majority of their colleagues will be in receipt of a flat rate payment.

It is tempting to ask whether or not the Government's attitude to travel awards is an extension of Mr Tebbit's call to the unemployed to "get on their bikes". The rough justice and the anomalies created are widely recognized even by Government itself. What is needed is an implementation of the principle enshrined in that old AUT salary campaign slogan "rectify the anomaly". We need a rectification that will ensure that students, already on an inadequate income, have the cost of travel incurred in the business of "being a student" fully reimbursed.

Bob McLean

The author is chairperson of the National Union of Students (Scotland).



Mr Les Willmore, a lecturer in textile technology at Leicester Polytechnic, demonstrates the flexibility of a new knitted roofing material, which he developed with a commercial company. The polyester fabric is non-degradable and has special qualities of bonding with waterproofing liquids.

Lothian tutors in wages row

Adult education tutors have been in a row over wages for some time. In a letter to tutors, the EIS branch committee says that since councillors and the education department want

tutors to do exactly the same work for £2 an hour less, they decided that the most appropriate form of action would be one of non-cooperation and working to contract.

"We do not wish to interfere with the actual teaching of students but intend a general withdrawal of goodwill towards the education department."

The council's Alliance group, which holds the balance in Lothian, successfully proposed a review of whether the tutors should be entitled to claim expenses.

But a tutor's meeting said this was merely a placatory measure which did not promise anything concrete. However, tutors are urged to lobby Alliance councillors in an attempt to have the decision rejected at the full council meeting later this month.

overseas news

Israeli cabinet gets the message

from Benny Morris

JERUSALEM

The Israeli cabinet last week spent three hours hearing about and discussing the financial plight of Israel's institutions of higher education. It was a rare digression by the ministers from their usual fare of Lebanon, the PLO and the country's more general economic woes.

The discussion, which took up most of the cabinet's regular Sunday morning session, was led by Professor Haim Harari, who serves as head of the council for higher education's key planning and budget committee. The ministers focused their discussion on the committee's recently published report on the development of the universities in the coming five years.

The report's main point was that the higher education budget must grow by 3 per cent annually if present standards at the universities are to be maintained. The ministers considered this recommendation against the backdrop of recent successive cuts of state subsidies of the universities, amounting in the past 18 months to a real terms 10-15 per cent budget cut for most of the institutions.

Reviewing the situation, Harari said that since 1975, the number of students at the universities (now about 63,000) increased by 23 per cent while university staffs have been reduced by 5 per cent. Government subsidies to the universities since 1975 have decreased in real terms by 10 per cent (while the budget of the ministry of education, for example, has grown by 41 per cent and that of the health ministry by 50 per cent).

Harari noted that the state has taken away \$1bn from the subsidy of the universities this year on the basis of a projected doubling of student tuition fees, but that the increase - opposed by the student unions - has not yet gone into effect, and no one knows when and if it will. (Israeli students pay about \$500 in tuition annually.)

Most of Harari's figures, underlining the universities' growing impoverishment, were not challenged at the meeting by finance minister Yigal Cohen-Orad, who is engaged in a major effort to cut government spending across the board in order to tackle Israel's annual 400 per cent inflation rate.

The cabinet, at the end of the discussion, decided to set up a special ministerial committee to formulate recommendations regarding state supervision of the future development of the universities.

Some critics within the government have recently charged that the universities are in part to blame for their financial predicament - which has involved massive borrowing by the institutions from private banks at high interest rates - because of excessive infrastructure development and expansion in the decade after 1967.

During the cabinet, according to Dov Keren-Ya'ar of the Council for Higher Education, the ministers asked Harari how the universities were tackling the problem of Israel's shortage of electronic, computer and aeronautical engineers.

Karen-Ya'ar said the Council for Higher Education was pleased that the cabinet had appointed a committee to review the universities' situation. He said it indicated that the ministers had taken Harari's message to heart and he implied that the budget-cutting trend vis-a-vis the universities in the present government had been stopped.

Harari pointed out that the existing problem of lack of engineers would become far more acute in 10 years' time. Then the budget cuts by today's government would clearly come home to roost. Whereas the total state allocation to Israel's six universities, and the postgraduate Weizmann Institute of Science at Rehovot was some \$250m a decade ago, the current total allocation to the universities and the institute stands at \$200m.

Harari replied that the university production of engineers was directly linked to the budget. Budget cuts meant less teachers of engineering and a reduced ability by the universities to take in students.

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Cash boost for Mexican universities

from Emil Zubryn

CUERNAVACA

Mexican universities and other higher education institutions have been given three billion pesos (\$18m) to supplement their budgets. The money, which will provide a minimum of \$250,000 per institution, is being divided up according to programmes pending and the priorities of the federal government.

While not an enormous sum, the funds will be used mainly for research, development of new study methods and training of professors, apart from other programs planned to boost Mexican academic quality, according to Rafael Velasco Fernandez, director of the National Association of Universities and Institutions of Higher Learning. The association represents 78

educational institutions of various sizes, from very large, like the National University of Mexico, to relatively smaller ones.

Velasco Fernandez stated that insufficient funds has been the chronic problem facing national institutions of higher learning. He did, however, reject arguments by university administrators that the government has reduced university budgets in real terms over the past decade. However, the drastic peso devaluations of recent times and the steady daily 13-centavo decline of the Mexican currency actually does represent a reduction - at least in purchasing power - as equipment, salaries, etc. have soared. The association director admitted that there has been no compensatory

adjustment in budgets, thus accentuating chronic financial problems.

As a result of limited funds, Mexican universities have not had sufficient economic resources to enable them to mount new programmes and meet the needs of students. Velasco Fernandez termed as "pure fantasy and a foolish Utopia" to even imagine that universities can reach independent financial autonomy through their own resources, and do without official subsidies.

Actually there have been no drastic cutbacks in budgets for the nation's universities. Despite the economic crisis, the government has sustained its programme of supporting higher education. Dean Octavio Rivero Serrano, of the National University of Mexico

(UNAM), labelled the mushrooming institution he heads as a "university system", and not a "classical university" because it has a very large student body of 328,000. This outsized student population does require academic, economic and financial changes, he admitted. But he said these matters are under study, and the entire university community will be given a chance to express its opinion before any action is taken.

One of the main considerations has been a possible increase in tuition fees which have been on a token level from the start. The dean is opposed to any increase since this would hurt students from low-income families, and his contention is that the greatest number of young people should continue to have access to a university education.

Expenditure on non-pay rose by only 2.5 per cent overall and, as some items of costs are largely outside our control (eg energy prices, and price increases imposed by State agencies) the effect on those non-pay items which contained any element of discretion was very adverse.

"Replacements of equipment could not take place at all during the year. Maintenance of buildings had to be restrained. These necessary adjustments have to be considered as being only temporary in their effect, and will have to be made good at some future date, probably at greater expense," says the report.

"The experience of unplanned cuts in recurrent grant, and the State's propensity to dictate conditions of pay (which absorbs 78 per cent of our expenditure), even though it cannot or will not provide for the costs of doing so, make the accusations that universities are inefficient places sound rather hollow."

"The Irish universities produce internationally acceptable graduates, and do so at much lower cost than any of the surrounding economies. Irish universities are competitive, they have adopted up-to-date methods in many aspects of their operations," insists the report.

The treasurer adds: "The correction of any deficiencies that may be left (and any reasonable man would admit that there are no large organizations which do not carry some shortcomings) must be recognized to be relatively insignificant compared with some of the quite scandalous situations which are now regularly reported to exist in public and State-sponsored bodies, as well as in the private sector."

Protests over honorary degree for Reagan

from John Walsh

DUBLIN

The National University of Ireland is to confer an honorary degree on President Reagan when he visits Ireland in June. The decision, taken amid some protest, followed a request from the government to the senate of the university.

The head of the government, Dr Garret FitzGerald is also a member of the senate to which he was elected by the graduates of the university.

He attended the meeting at which the decision was approved but did not come, apparently, to speak on the motion, which was carried by 25 votes to 6.

One of those who objected to the honorary doctorate was a professor of history at University College, Cork. Professor John A. Murphy. He said the government should not seek to use the university in this fashion. The concerns of the government were political while those of the university were academic and scholarly and they should not be confused.

The issue, he said, highlighted the failure of the state to devise its own system of awards.

He contrasted the enthusiastic atmosphere generated by John F. Kennedy's visit to Ireland over 20 years ago and the somewhat reserved feeling about President Reagan's visit.

Strict security precautions are being taken for the president's visit which is expected to start off considerable protests especially over his policies towards central America. Students, teachers, and third level college academics are the for in organising "reception" committees for the visitor.

Two of the three representatives of graduates of the National University in Sean Eireann (Parliament's upper house) have already made their opposition to his visit. They are Brendan Ryan, a lecturer at the Cork Regional Technical College and Michael Higgins, a sociology lecturer at University College, Galway and chairman of the Labour Party.

Plans to cut student intake at Pristina University - the scene of pro-Albanian demonstrations in 1981 - are slowly going ahead. Next year, the number of first-year full-time students is to be cut to less than 8,000 (15-16 per cent down) although part-time enrolments will be allowed to increase by 6 per cent to around 3,800.

First year students will be encouraged to register for the natural sciences, mathematics, technology and biomedical sciences. This will de-emphasize subjects like history and Albanian literature and language.

Fees to rise again

from John Walsh

DUBLIN

Tuition fees for Irish students will go up a further 20 per cent in the autumn, nearly double the rate of inflation.

The latest increase will push fees up around the IRE800 to IRE1,000 mark with some going over IRE1,000 for the first time.

There has been a consistent policy of increasing fees by a rate higher than inflation for the past few years. Three years ago they went up by 35 per cent and last year, in the case of the regional technical colleges, by 100 per cent, although admittedly from a low base.

The policy has meant that a greater proportion of college income comes from fees. In the case of University College Dublin the percentage of total income accounted for by fees rose from 11.98 per cent in 1979/1980 to 16.11 per cent in 1982/1983. In Trinity College Dublin, income from fees rose by 35 per cent in a shorter number of years.

But in neither case does the increased fee revenue ease the financial crisis in the colleges, as direct state aid has not kept pace with inflation. UCD's case, this has resulted in the freezing of 112 vacancies - academic and non-academic out of a total staff complement of around 2,000 full time and part time.

In Trinity's case, the annual financial report of the treasurer, Mr Paul Winklemann, has some strong criticism to make of government cutbacks.

Expenditure on non-pay had to be slashed in order to remain within the financial parameters set by income expectations and the insistence of the public authorities that deficits could not be permitted.

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Some special science courses may be extended - these, however, are under close party scrutiny. After the 1981 disturbances, party control in the university was considerably strengthened and even last week, a joint meeting of the Pristina University and town party presidiums sharply criticised a number of "social sciences" lecturers who

allegedly "passively contributed" to the "pro-Albanian" indoctrination of students, by neglecting to condemn recent events in a sufficiently vigorous manner.

Furthermore, the "language structure" of the new students will be changed. In 1981 and 1982, virtually no student enrolled for the language of instruction. Now, it is recommended that the ratio between those taking Albanian language courses to those taught in Serbo-Croat should not exceed 3.4 to 1.

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Patricia Santinelli meets the ACP's new leader

Barnard's principles for principals

Dr Alan Barnard who recently became president of the Association of Principals of Colleges does not plan a better-skilled race for change for change's sake.

Instead Dr Barnard, principal of Willesden College of Technology wants to see a period of stability and consolidation which will help develop its new central office and support for members and will mould the association into a more efficient and significant organization.

He feels this is badly needed at a time when principals and their colleges are reeling from having had to react and adapt to a wealth of initiatives. These have ranged from those of the National Advisory Body, the Business and Technician Education Council to the Youth Training Scheme, and lastly but not least to the White Paper Training for Jobs.

"There have already been many changes and undoubtedly these will continue to shape our world as we live in where financial criteria rather than educational desirability dictate where we go," Dr Barnard said.

Nevertheless some new methods are bound to be necessary, as the association is increasingly being thrust and is thrusting itself into the national arena.

The principals' views are being sought far more than before at a time when it is highly important that they should be heard, as much of the colleges' work is directly affected by Government plans.

"We are being given increasing opportunities to shape the initiative rather than simply reacting," Dr Barnard said.

Only last week Dr Barnard along with council members took the APC views first to Mr Geoffrey Holland, director of the Manpower Services Commission, and to Mr Peter Brooke, under-secretary of state for education. The remainder of his time was being taken up by BTEC's council on one of only two educational capacity as one of only two educational members.

Dr Barnard is adamant, however, that to express views which have the full backing and respond to the needs of the association's members, new mechanisms for feedback from the association's branches will be needed.

"This is one of the dilemmas facing the association. For on one hand they have a whole group of people who feel justifiably that what they have to offer is important, and on the other they have the Hollands and the Brookes who would resist derisively if APC said it could not offer a point of view on a given issue because it had to go away and consult its members."

"When I go round the branches shortly, I am going to organize a system of feedback, so that at any given time we in the centre have an idea of what is wanted and in what form," Dr Barnard said.

In many ways this approach reflects a philosophy which Dr Barnard adopted when he became principal at Willesden in 1974.

He says that at the time there was a general feeling of having been let down because the college had wanted to become part of Middlesex Polytechnic but had failed to do so.

"He felt a new ethos involving all staff must be created for the college. The opportunity came with the formation of the Technicians Educational Council. He decided then, that his institution should become the first in the field of higher technical training."

He and his staff worked very hard and developed their own programmes which were so successful, they had a substantial influence on subsequent TEC units.

The college has 365 full time equivalent staff only concerned with engineering, building and science, so the major emphasis is on science and technology, although Willesden also has a strong liberal studies department.

Dr Barnard's experience of devising new programmes goes back to his first job as a senior lecturer in inorganic



Dr Barnard: increasingly taking the initiative

chemistry at Hatfield College, now the polytechnic.

"This was a very exciting time to be in colleges. It was a good period for entrepreneurs, and we were able to develop our own degrees without any restraints or constraints," Dr Barnard said.

Only subsequently did he realize how lucky he was to have been there at that particular time. Hatfield was one of three jobs he was offered, another being at Imperial College which would have led him to a very different career.

Dr Barnard says he has no regrets, although he admits being stunned recently by the enormous divide, particularly in terms of resources between higher and further education, when he visited an old friend, Professor Jack Lewis, master of Robinson College, Cambridge.

After nine years at Hatfield, Dr Barnard moved to Wirral College as head of science and from there became vice principal of Coventry College.

PROFILE

Since then Dr Barnard has developed firm views about the role of the college and the heavy demands placed upon principals. He points out that until the late 1970s, people in senior positions in the colleges were appointed because of their academic calibre.

"But the world has changed. There has been a much greater infiltration of party politics, greater emphasis on cost effectiveness, there is the influence of the Manpower Services Commission, external boards and a hardline taken in industrial relations," he said.

The college principal is now being held responsible for all these aspects as well as the academic work by the maintaining authority.

"This requires skills in particular to run meetings and possibly to manipulate them. The issues that come up range from sex equality to health and safety, among the many that have emerged during the last five years. At the very least one has to be aware of not dropping clangers," he said.

For Dr Barnard, the role of the principal and that of the association is intertwined. He points out that the main threads of the association are its role as a trade union body, and its position as a professional association of like-minded people.

As a trade union APC is being increasingly successful in representing its members in time of trouble. A recent case was that of a principal whose college ended up by being £200,000 worse off as a result of a political decision.

"The local authority wanted to sack him personally. The association provided staff only concerned with engineering, building and science, so the major emphasis is on science and technology, although Willesden also has a strong liberal studies department."

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Good teaching

Oxford Polytechnic's assessment committee bases promotion on teaching performance. Karen Gold reports

Talk of "good teaching" has a 1980s sound: it smacks of the production line, of quality control, of "standards", of central interference with academic individuality, of concentrating on doing more in order to distract attention from lessening resources.

Or so not a few lecturers (note: they are not called teachers) in public sector higher education think. Yet the cause of teaching is advancing, whether for those reasons or for others.

This is a look at some moves to increase the quality and prestige of teaching at one polytechnic: Oxford. It is not supposed to be a polytechnic model.

Oxford set up an educational methods unit in 1980. Its activities include group and individual advice on teaching to lecturers; help with evaluation of teaching and courses through producing questionnaires and reports; informal seminars; publications, including a twice-termly *Teaching Newsletter*; initial training courses for staff with less than three years lecturing experience; funding for conferences and courses, as well as study skills help for students.

But three years before the unit was established, Oxford had made a public commitment to encouraging the prestige of teaching among staff, by making it a key promotion issue.

The commitment was a challenge on three counts to the opponents of making teaching a separate and prominent part of staff assessment and rewarded achievement. It challenged those who argued that good teaching was an inevitable result of good re-

search. It challenged the concomitant position: that if lecturers did not have a good research/publications record, their claims to good teaching were undermined. And, by saying that promotion without proof of good teaching was unlikely, it challenged all the unconverted.

That was the theory. Three groups within Oxford Polytechnic have been looking at the practice. The advancement committee, which deals with promotions, decided that, five years after this commitment was made, it was having little effect. They asked the polytechnic governors to consider it, and they also asked the head of the educational methods unit, Graham Gibbs, to set up a working party to consider how it might work better.

The result was a sharp clash among the governors and advancement committee. Not between the pro and anti-teaching groups - because everyone was naturally in favour of "good teaching" - but between those wanting overt assessment of teaching for promotion, and those saying it was all part of being a "good" academic and therefore doing research.

The positions polarized in two proposals put to the governors: one that teaching should become "the most important criterion" for promotion, and the other that teaching, research and administration should cease to be considered separately at all.

The governors passed neither. Instead they set up a joint working party with advancement committee to consider what to do next. That is still meeting.

Meanwhile the advancement committee has gone into a second phase of looking at teaching, through the educational methods unit working party's recommendation that it ask applicants for promotion to submit teaching profiles.

Last summer Graham Gibbs produced a paper with the advancement

committee's imprimatur, explaining how those profiles should be constructed. The working party also looked at two methods widely used in North America: student ratings, and peer evaluation.

Both were rejected, according to Graham Gibbs, the former with more vigour than the latter. But people did agree that some kind of standardized course - though not teacher - evaluation might be looked at in the future.

The advancement committee agreed to monitor its decisions in the light of teaching profiles submitted since last summer. Clearly it is too early to know whether there has been any change.

But Graham Gibbs identified two reasons why the first five years of the commitment to teaching as the main promotion criteria had failed: the fact that members of the advancement committee as senior polytechnic staff had reached their position through research achievements; and the fact that way of teaching achievement was being presented by applicants to the committee.

"Many staff ignored it altogether," he said. "Those who did it made statements like 'I have a close relationship with my students. They all ways tell me when my teaching is wrong. They hold me in high regard. Behind the general statements about teaching, there was no evidence whatsoever'."

His criticism highlights another of the key disagreements over this issue: what is "good teaching" and how can it be quantified?

Gibbs's paper on submitting teaching profiles for promotion does not tackle this issue directly. Instead it deals with the practicalities of developing both the teaching and the profile, assuming that the more effort put into the development of the teaching and the evaluation of it afterwards, the better chance it stands of being good.

"Teaching excellence is the most important criteria for promotion and

Promotions at Oxford Polytechnic are ultimately in the hands of the director. But staff wanting promotion must first apply to the Advancement Committee, which includes staff representatives as well as senior administrators and deans.

Since 1977 the governors have set these criteria:

- teaching excellence;
 - general academic excellence, demonstrated by course development, research, consultancy, publications, practice, or other achievements that might lead to a member of staff being recognized as exceptional;
 - the demonstration of administrative effectiveness.
- "It is probable that outstanding performance in (a) in addition to (b) or (c) will be necessary to secure promotion to principal/lectureship."

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David Walker on the fruitful partnership which has become one of the Government's sternest critics

Jones & Stewart: local government's dynamic duo

The Gay Hussar in Greek Street, still one of the best London restaurants for a taste of Hungary is a worldly place. A haunt of actors, literati and politicians of a leftward slant, the clientele can sometimes be as flashy as the cuisine is solid.

The presence of George Jones the other week on one of the restaurant's discreet upper rooms was thus slightly out of character. For though no one would call the professor of government at the London School of Economics naive, Professor Jones is very much a serious academic, rather diffident, something of a contrast to the organizer of lunch that day, Christopher Price, ex-MP and high class public relations man.

Yet on this occasion Professor Jones was not studying politics but doing it. He was there on behalf of the Local Government Campaign Unit, invited to eat his smoked goose and Debrecen sausage in the cause of putting over the council's case against rate-capping and abolition to a party of assembled journalists.

Indeed Professor Jones is not new to such activity. By any count, his work over the past three years on the council's side has made him an experienced campaigner. The novelty of the lunch was that he was without the Birmingham academic with whom he has stuck up a fecund partnership, producing a stream of books, articles and conference performances that a certain government minister was heard, in private, to bewail the fact that thanks to them while Mrs Thatcher had the votes, her side "had certainly lost the arguments".

The partnership in the cause of local government is Jones & Stewart; Professor Jones the straight man to Professor John Stewart and his more rubicund delivery (though even for him local government is not exactly a mine of jokes).

Together they have become an institution which if not quite a household name is certainly familiar to anyone who has paid the remotest attention to the story of how the present government has attempted to "solve" the problems of council rating and spending in local autonomy and an increase in the powers of central government.

Jones & Stewart can hardly be avoided in the weekly columns of the *Local Government Chronicle* which lauded them once as "freedom fighters". And together the two professors have bombarded the serious newspapers with letters critical of the centralizing trend in Government policy.

Recently Allen and Unwin published their book *The Case for Local Government*. The partnership is now referred to by course participants at Professor Stewart's Institute for Local Government Studies at Birmingham simply as *Stewjo*. Singly and together they have taken to the media. Jones & Stewart represent academe on the campaign trail and if the LSE or Birmingham bothered to do what some of the less well-endowed brethren among the universities do and list in their bulletins the media appearances of their teaching staff, it would be a lengthy production.

Like all fruitful partnerships Jones & Stewart do not spend a great deal of time together, communicating mainly by mail or phone. Their professional interests diverge, too. Professor Stewart recently stepped down as director of the InLoGov, to which he had come in 1966 to assist the then director Henry Maddock develop the Institute's work on local government in Britain.

Professor Stewart is a big, shambling man full of energy. Under his enthusiastic leadership the Institute has become not quite an intellectual powerhouse (that's not his or its style) but a leading centre for practical training for practising local government officers and politicians; some say InLoGov nourished the "corporalist" approach to town hall management which emphasizes the need for strong central authority from a town clerk, rechristened chief executive.

Prior to Birmingham Professor Stewart, who is now 55, had published a pioneering study of the working of pressure groups in the House of Commons and had several years of the non-academic world as an executive in the Yorkshire division of the National Coal Board.

Professor Jones (now 46) has a conventional academic career paralleling Professor Stewart's as an Oxford undergraduate and a research student at Nuffield. During it he produced in collaboration with Dr Bernard Donoghue a widely-admired biography of

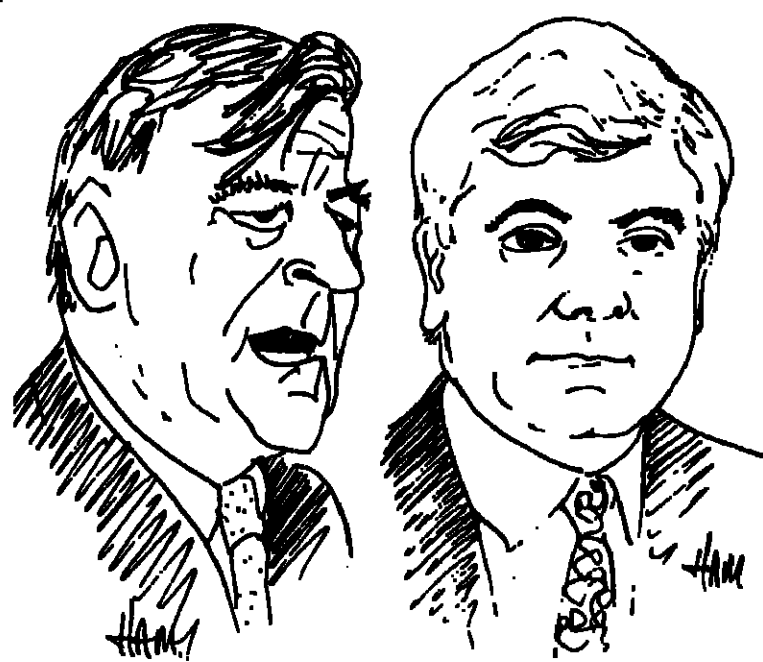
Herbert Morrison. The book, many felt, managed to be both a work of scholarship and still to enter a plea within contemporary politics for a man whose reputation within the Labour Party had been severely tarnished after his glory days as wartime Home Secretary and deputy to Attlee in the post war administration.

The association with Dr Donoghue may explain one of Professor Jones's current interests: the build up of a central political staff at No. 10 Downing Street under the prime minister. Dr Donoghue moved from the LSE to join Prime Minister Harold Wilson as head of a political policy unit whose life was extended under Mr Callaghan until Labour lost power in 1979.

The Jones & Stewart partnership began in 1976 when they were both asked by the then Labour government to serve on the Layfield committee on local government finance. Professor Jones has recalled: "Up to the time of meeting him John seemed too much the champion of the officer against the member. It was not until we worked together on Layfield that we realized we were very much on the same wavelength. When he spoke I found myself agreeing."

Their hectic current programme began in earnest in 1981 as the Government's determination to cut council spending became evident. They had no quarrel with the Government's objective; they feared the damage to local government's rates plus a heavy burden from the government's means.

Professor Stewart says: "There was a point of view not being expressed



John Stewart (left) and George Jones: an institution

over the Local Government Planning and Land Bill" (which gave the world its first sight of that mysterious creature the GRETA). "Our conviction is that local government is of value."

As they put their case, to meet the complex challenges of our time any system of government must have the capacity to learn, respond, change and win public loyalty. Inherently, they argue, local government is better able to do these things than Whitehall.

"Our argument is that learning is advanced by a diffusion of power and a diversity of approach, because there is more to learn and greater variety to learn from. Centralism reduces the capacity of learning."

"Our argument is that localness brings a capacity to recognize and to respond to problems and issues, because decision-making in the locality is about situations known and is itself more open to pressure."

And so on: Jones & Stewart argue on a level of principle but not one of high abstraction. They both make clear that they are defenders neither of the present system of local authorities in its entirety and certainly not of the control of councils by any one party - indeed InLoGov has cleverly avoided the identification with big city Labour governance that now colours, for example, the School of Advanced Urban Studies at Bristol University.

And yet doesn't their enthusiastic advocacy of the councils' case against the Government's rates plus a heavy burden from the government's means?

Professor Stewart says: "There was a point of view not being expressed

highly skilled craftsman who was of considerable help to husband William in his various enterprises."

So suggested that the dislocation in our view of Jane Morris came about because we uncritically accept the image offered and closely identify image with models to satisfy our own romantic expectations. Some of the best evidence came from a series of photographs of Jane taken during a session "directed" by Rossetti, in which he clearly manipulates his models to achieve particular iconic effects.

Photography as documentation has long been a staple tool of art history, so it is not surprising that the gradual process of recent years whereby photographs have been progressively manoeuvred away from the arena of "information" into the arena of "art", should itself become a target of close study.

As a result, the American researcher in the history of photography, offered a somewhat cynical interpretation of the discipline's growing pains. Centring her analysis on the so-called "golden age" of French Second Empire calotypes, she explored the origins of the essentially commercial and even academically heights which have brought photography to the fore in the period to such public prominence and price.

Gail-Nina Anderson claimed that our ideas about Jane Morris as an individual had been cornered too closely with the received view of male adorners had given her to meet their own promotional needs. Starting with Dante Gabriel Rossetti's painting "Mariana" for which Jane Morris was the model, she contrasted the melancholy, languid and essentially passive character of the imposed "person" in this and other pictures with the busy, energetic and "pedigree" are still considered valid but increasingly

What used to be an end in itself has now become one of a series of means towards a much more ambitious end, that of setting the artwork diagonal artifact in a conceptual frame as well as a circumstantial frame.

Paine's thought that a work of literature (and by implication art) can only be properly assessed in terms of *la race, le milieu et le moment* is in intellectual favour again after many decades of a more purely aesthetic approach.

For progressive art historians the analogy between literature and work of art has also come full circle and fallen happily into place. It is now legitimate to "read" a painting, a piece of sculpture, an African mask, or a patchwork quilt as "text". This "text" also has "sub-text" and "codes" all of which require deciphering if the full conceptual significance of the objects ("text") is to be explored. You borrow method and jargon from that area of the conceptual domain which you wish to illuminate relative to the "text" (object).

Which brings us to another major innovation, namely that in any "transaction" the viewer (reader) must be taken into account as much as the object or its maker. So, for example, Norman Bryson in his challenging

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ing information, tampering with facts. Equally there would be problems if one were working only with one party or one local authority association."

Besides, he adds, there is a long and honourable tradition of academics being closely involved with local government policy making, going back at least to the days of Professor William Robson at the LSE and his Greater London group.

It might be noted that, recently, the Jones & Stewart arguments have not gone unchallenged. Environment minister Mr William Waldegrave has made it his business to take to muster some more intellectually cogent arguments on the Government's behalf during the present debate about the Rates Bill. Possibly by coincidence Mr Nevil Johnson of Nuffield College, Oxford has recently been heard knocking the "localists" viewpoint. (A little Oxonian bird has been heard knocking the "localists" viewpoint, a professorial fellow in politics, and Professor Jones may have been heard during elections to the Gladstone chair in public administration the other month.)

Jones & Stewart do point out that they are not continually attacking the Government. On the controversial abolition of the metropolitan county councils, they might even have sided with any Government plan a little more considered and researched than that contained in the White Paper *Streamlining the Cities*.

Professor Jones repeats that they are not defending councils, warts and all. "The need is to look beyond any short term crisis and panic measures, beyond the immediate attack and the consequent defence, to a long term and positive solution."

The heart of that, both men believe, has to do with the subject matter of the Layfield inquiry: how councils raise revenue. They advocate an independent source of money separate from and perhaps in addition to property rates, a local income tax for example.

Needless to say, the present Government does not have extra income tax on its agenda let alone giving a buoyant source of revenue to councils which have, in its eyes, shown such propensity to "overspend". Jones & Stewart intend to keep up the battle, however, whether it means an even heavier schedule of speaking engagements, letters to the editor or luncheons at Soho restaurants.

As for "overspending", Professor Stewart recently told a weekend school of council lawyers: "Overspenders and underspenders are what local government is about. If every authority spent what the Government wanted, what point is there in having a local tax and local elections?"

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Bernard Crick

Driving along the freeway of the Orwell trail

Unlike David Lodge, I don't like the roar and hum of jet engines; but I do like driving in rural America. From Wake Forest University, Winston-Salem ("the tobacco capital of the world"), through Midway, Welcome, Asheville, Elmer, Candler, past Samcand, Carthage, Troy and Why-not and into Norman, through Rockingham ("founded in 1785" - someone thought there was ideology in British politics in the reign of George III), stopping for lunch in Hamlet (though I ate a cheeseburger deliberately), through Scotland County, all Dogwood and Judas trees; white and carnation blossom all the way, Old Hundred, Aberdeen and Evergreen (part part of the 90-mile 27-yard swathe of twisted, slit-open trees, roofless houses and torn-apart cars that took the turn on March 28 that took 98 lives), finally through Waxhams and Delco, leaving the red soil of the Piedmont for the Tidewater sand with its darkgreen swamp cypress trees festooned with wisteria and the gardens of even the poorest cabins or shiniest mobile homes blazing with azaleas, finally to the coast of North Carolina, Wilmington (founded 1724), and the Blockade Runner on Wilmington Beach where the Danforth Foundation of St. Louis, Mo. (Purina hog food) were holding their annual conference for their associates on - inevitably - "George Orwell and the Dilemmas of Our Times".

When, despite having read David Hume, I began to see the coming of 1984 as inevitable, I decided just to lay back and enjoy it. There is an apocryphal story that Alan Bullock one year gave himself until May 1 to finish research and begin writing his life of Hitler, saying that if on May 2 evidence was found in captured war archives (and verified by Trevor Roper - that's my addition) that Hitler was born of Jewish parents on both sides, it would have to wait until the revised edition. There has to be some cut-off point because facts are infinite, perfection is unattainable and success is always limited and relative. I would never have finished my life of Orwell otherwise, though I was much helped by the widow (and there is always a "widow" in contemporary biography, as Robert Skidelsky has recently reminded us) breathing down my neck with a deadline on a contract which would have removed my absolute right to decline and say what I pleased - a deadline that, by the end she was hoping, almost predictably, I would not meet. And all this afterbirth on Orwell is, of course, a total interruption of current research - though I do insist on offering an extra and gratuitous lecture wherever I go on "British-Irish relations" (worth something one day?).

But already my May 1 deadline has slipped to May 7, to attend a conference on Orwell at the Library of Congress. This will be something special. Professor Geoffrey Meyers and Professor Peter Geoffrey, deadly rival Orwellians, will be waiting for me on the other side of the coral and are reputed to be well armed. (Would you like an anonymous account of the action?). Perhaps Professor Peter Davidson, who is editing the new and magnificent 1984 revised and complete Orwell (at long last) will lead for me. It gets too hot, though normally I'd be honoured to lead for him. Or another friend from what my Southern friends call "the old country" might help, and Jonni Calder, being Scottish, may have something of the feuding spirit of the mountains in her rather than the literary pretensions of the Tidewater.

Until Washington has been exhibited in its "top-of-the-line" lectures on Orwell, I am content to let

Orwell lecture series, conferences or happenings is sweeping North America; partly it is a God-given opportunity for interdisciplinary activities (the lack of which shows us up so badly, our nervous demarcation lines maintained by the lazy and the second-rate), and partly it is that the reputation of *Nineteen Eighty-Four* (rather than its actual content) has triggered off all kinds of deep worries that Americans do not always articulate. The popular belief in "progress" fades, a mood of realism grows, despite their President, despite our President.

But I'll need to be sharp on the text at Washington and in better shape than at Rosemont College, Philadelphia, where two weeks ago I realized that my glasses were in Portland, Maine. But the sisters of the Society of the Holy Child of Jesus, with whom I was staying, produced four "spare" pairs of bi-focals (kind white lies) for me to choose from, one of which was good, except that the sister's head was so much smaller than mine that I only dared wear them to give my actual lecture. Seeing my carefully typed script through a nun's glasses certainly limited some of my penultimate prompts and I cut out all references to Julia. But a vice-president of the British Humanists must acknowledge such kindness and also, with his own glasses on, the clarity and courage of the letter on "Just War" of the American Conference of Catholic Bishops, which has so embarrassed the President and could hardly please Mr Hestline.

The Danforth Foundation exists for worthy objects and the Danforth associates are couples from campuses chosen because they "like students", a shattering comment on the rest of us. Danforth used to give them some money annually to entertain students but now it simply rewards them on an annual conference on an interdisciplinary topic at a good hotel without students. The tone was very earnest, friendly, Protestant and temperate, and the level very variable. We were the only couple in the bar afterwards, while the rest square-danced, so then in guilt I agreed to judge the "skits" at the last evening's social.

The discussions had little to do with Orwell. Alex Zwerdling, Professor of English at Berkeley and I stove hard in lectures to hold them to the text, but the discussion groups raced, walked or limped off into every worry of our times, dipping the text only for prophecies, parallels or tags for a sermon. But, after all, as Zwerdling himself pointed out, a novel deliberately crafted to reach both intellectual and common reader is intended to stimulate thoughts and concerns wider than the story.

At the end of the day I prefer American civic earnestness to our habitual extremes of indifferent high intellectualism or cynical professed indifference to the common man and the common reader. Trying to put Orwell in the tradition of Swift, Dickens and Wells doesn't ring many bells here. Perhaps I should reread Mark Twain, another serious humourist and mocking cynicist. There are three ways to limit political power: I extemporized last night: counterforce and control, persuasion and reason, then satire and mockery. Satire is well established as a literary genre, less well as a political force. I must try that line in Colorado. There, I suspect, *Nineteen Eighty-Four* points to conservatism and riparian rights.

Each year across Australia, about one in every five school leavers offered admission to higher education, chooses instead to defer entry for at least 12 months.

The great majority of these students fail to take up the offer to enrol the following year. How many are permanently lost to higher education is unknown, but the number must be substantial.

Of those who do return, the benefits of a year away from the halls of learning appear to be significant. A south Australian study has found that deferring students consistently obtain higher scores in their tertiary studies than those who enrol directly from school: across universities and colleges of advanced education, across subject, and even in their second year of study.

Moreover, students who had taken a break showed a lower level of subject withdrawal when they did resume, indicating a greater commitment to their work. Deferring also gave students a greater sense of maturity, self-confidence, initiative and a sense of purpose not as evident in those who went straight on to further studies from school.

The research found that deferment could operate as an academic filter, with many students "self-selecting" themselves out of higher education. Particular groups of students, notably those with low matriculation scores, but also women in metropolitan areas and country students of both sexes, tended not to continue after a year's absence from formal education.

The study was carried out by Dr Russell Linke, of the Tertiary Education Authority of South Australia; Dr Alan Barton, of the South Australian College of Advanced Education; and Mr Bob Cannon, director of South Australia's Advisory Centre for University Education.

According to Dr Linke, although the research findings are based on the experience of South Australian students, they are probably applicable to other states.

The researchers looked at enrolment patterns in South Australia's tertiary institutions between 1978 and 1980. They found that, for most students, deferment of entry was a positive influence on their personal development and academic success. In

Several things distinguish Haifa University from all the other universities in Israel: pejoratively known as the "Red Arab" University. It is never poorer, academically less prestigious, and it has the largest number of Arab students - 800 out of a total of 1600 - and Arab academic staff. This is hardly surprising since Haifa lies at the outer reaches of Galilee where most of Israel's Arabs live, and is itself a mixed city. But in one field, crucial to Israel's future, Haifa University is way ahead of all its rivals: the explorative study of Arab-Jewish relations.

Over the last two years the Jewish-Arab Centre, an extra-curricular department of the university's Institute of Middle Eastern Studies, has been discreetly engaged in a project aimed at creating sympathetic understanding between Arab and Jewish Israelis, that one day might aid a reconciliation between Israel and her Arab neighbours. But the project's more immediate task is to defuse the tension between Arab and Jewish students on campus.

After 35 years, the Arab-Israeli conflict cannot be explained rationally; its core is emotional. Cultural idioms are misunderstood and misinterpreted; hate and distrust accumulate round stereotype images which both Arabs and Jews have created for each other. At Haifa University's Jewish-Arab Centre, attempts are being made to cut through all this by bringing Jewish and Arab youths into contact with one another as human beings rather than as antagonists, in controlled confrontations which take place in group sessions.

The venue for the sessions is Beit Hagefen, a cultural centre mainly for Haifa's Arabs, run under the joint patronage of the university and the city council. In Beit Hagefen's relaxed atmosphere, groups of Jewish and Arab youths are assembled and put through a three-day seminar. Each group is composed of 14 participants divided evenly between Arabs and Jews, boys and girls. The supervisor is usually an academic staff

WORLDWIDE Benefits of a year out

this time, about 20 per cent of all school leavers offered a place in a college or university deferred for at least one year. Only a third of those deferring took up their offer of admissions in the following year.

Of the four reasons students gave most often for deferring, three related to the general idea of needing a break between school and higher education. "Clearly a large proportion of the deferring students were simply unsure of their feeling about higher education and preferred to take the opportunity for a year outside the formal education system to clarify their ideas and intentions," a report of the study notes.

But many students were concerned about financial support and immediate prospects of a job, while others wanted to travel or explore alternative types of education.

The self-selection process which occurs during the deferment year is based partly on the level of inherent motivation, partly on academic ability, and to a considerable degree on the relative desire for employment and financial independence, the report states.

Apart from acting against potential female students and those from the country, the filtering effect of deferment also works against particular fields of study. Medicine, law, dentistry, and music were found to have the

lowest net loss rates, while agriculture, education and paramedical studies had the highest.

The study found that for those students who subsequently returned to study, the great majority were sure they had made the right decision and only a tiny minority expressed regrets. Similarly, those who decided not to return were equally definite they had made the right decision to defer.

But the researchers argue that the problem for higher education institutions in attempting to develop a rational and equitable policy on deferment of entry, is to balance the inevitable losses against the apparent gains. On the detrimental side, the most serious effect is the substantial loss of potential students who are qualified for entry to tertiary institutions, even though they may have lower academic ability, but are more committed to tertiary studies.

Although about half of those who do not immediately return to study after the deferment year indicated they might still take up the offer of a place, their reasons for not continuing were often concerned with the need for financial independence. "Their loss from full-time higher education could in part be considered a product of inadequate student financial aid, rather than the lack of desire for higher education, or the existence of a stronger preference for a different sort of life," say the researchers.

They say that for many students, particularly those from country areas and probably those from lower socioeconomic areas, an improvement in financial assistance for students would go a long way towards cancelling the high and selective attrition rates.

The researchers argue that their findings should influence selection procedures for higher education. Not only should institutions acknowledge the social and education benefits of deferment, they should take it into account in selecting students.

For example, a limited number of students with matriculation scores below that required for immediate admission to a course could be guaranteed admission the following year, irrespective of what they chose to do in the intervening period.

Geoff Masteen

Building trust on a tightrope

member of the university in a relevant discipline. There are a few basic rules: no matter how charged a discussion becomes, heckling is strictly forbidden; participants must listen - tolerance is the lesson. Questions must be directed by an individual to an individual. Politics is taboo - but inevitably political feelings are expressed, albeit obliquely, in the discussion.

Issues central to Jewish-Arab relations are mostly dealt with in abstraction, through simulated games or imaginary situations set by the supervisor. For example, a Jewish girl is asked to imagine being an Arab girl who has got pregnant. How would she cope with her family's reaction? An Arab boy is asked to imagine that he is a Jew whose sister was going out with an Arab. How would he react? The initial responses are predictably based on pre-conceived ideas. But as the seminar progresses, Arabs and Jews learn to understand how misleading stereotype images can be, or what lies behind certain characteristic gut-reactions from either Jews or Arabs.

The films used in the seminars as aids, deal with aspects of the Arab-Israeli conflict in an abstract way, like the simulations games. One film, made in Canada, shows two neighbours quarrelling over a flower growing on the boundary between their properties. Each claims the flower. The dispute escalates to violence. The flower is destroyed and forgotten but the fight goes on until both properties are laid in ruin. The point is obvious. But the discussion that follows allows both sides to air their national grievances without direct reference to actual events. When, as often happens, reality obscures and tempers flare, the supervisor calls for a break to allow the participants to cool down.

Does it work? Does the understanding reached in Beit Hagefen lead to friendship between Arab and Jewish away from the framework of the subject? Ariel Karmi, head of Haifa University's Information and

public affairs, to whom I talked, admits that so far the achievements have been modest in this respect outside from Beit Hagefen and the university campus, Arabs and Jews seldom mix socially. The barriers too solid and have been there for so long. But a good deal of trust and understanding is achieved. For the Jewish youths, one important lesson is gained central to understanding the Arab-Israeli conflict. It is the Arab's emotional attachment to the land. Metaphors of the land as "mother", "sister", "bride", are basic in Arab literary expression. Hence loss of land is a violation, loss of honour, degradation. The Arabs, for their part gain an insight into the Jewish seemingly obsessive preoccupation with survival.

Much of the trust painstakingly built in Beit Hagefen is due to the Jewish-Arab Centre's discretion. What is said in the seminars is confidential. The Arabs know that they can speak freely without fear that their views would be passed on to anybody else.

Haifa University now plans to expand the project and apply it to regular curricular activities on campus. It is a step in a meaningful direction. But its ultimate success will depend on whether it could influence Government policies.

However, in its effort to bring Israel's overheated economy under control, the Treasury is making among other things, state grants to Institutes of higher learning. Haifa University is the most vulnerable to this. Its existence has hung on a balance before. Unless it can find outside finances the chances that it would survive another year are not good. The main sufferers from the closure would be Israeli Arab population, and the progress towards better understanding between the two peoples.

Eilon Salmon

Owen Chadwick argues that the division between arts and science is an illusion

The question is whether the Department of Education and Science, or the University Grants Committee, or both, are right and wise to push more subjects in higher education out of arts subjects into science subjects. We use the terms arts and science in this context loosely and conventionally.

I happen to be against the doctrine of the "two cultures", put forward by C. P. Snow in a notorious lecture. There are a lot of things in the world worth knowing, and worth finding out. Since the mass of enquiry is so vast, we all need to be expert in something and we all fail to understand jargon used, or theories expounded, by experts in something else. An expert in something is always an amateur in nearly everything else.

The idea that this failure to understand other people's expertise divides along the line between knowledge about man's mind and society, which is broadly arts, and knowledge about man's environment, which is broadly science, is an illusion. A student of history like myself has more sense of founding when an economist explains econometrics or an architect explains finials than when a biochemist explains what he is doing about hormones.

Late in his life Charles Darwin had no patience with poetry. Nothing could prove that this decline of poetic sensibility in the mature man had anything whatever to do with the concentration of his mental powers upon experimental observation of worms or feral pigeons. A mature historian might equally suffer from the same decline of sensibility, and no one could infer that it was anything to do with his concentration of mind on the economics of slavery in the southern states of America.

Away, then, with the doctrine of two cultures.

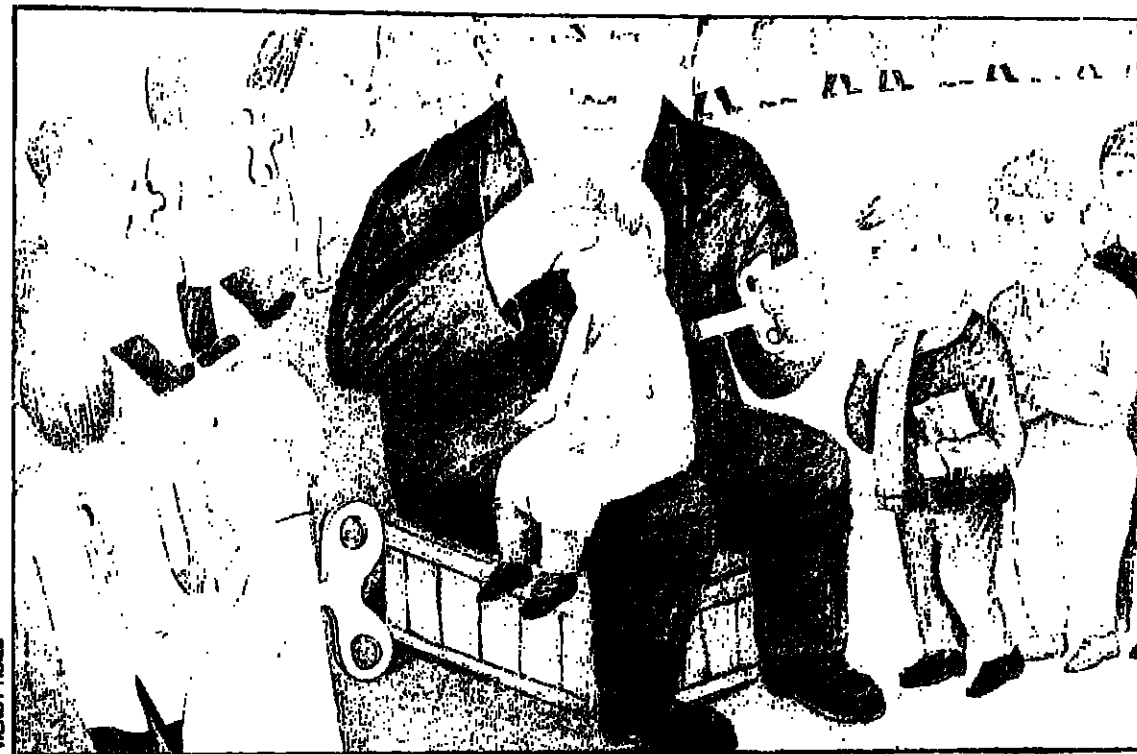
At certain stages in the development of humanity, new finds help or speed the process of study or enquiry - the discovery of the usefulness of an alphabet; the early medieval invention of the best way to bind a book that is easy to read; the creation of the printing press. The contemporary advance in storage and retrieval of information by machine, whatever its troubles in growth (yesterday I tried to find myself in a computerized library catalogue, which kept telling me that I do not exist), appears to be another such. No act of our government is more enlightened than its desire to propagate "information technology", and to make a sufficient ability in its use available to any of the younger generation who wish to master its methods and utility. In time this will benefit everyone, from the most sublime of art historians to the most earthy of sanitary engineers.

A moral axiom of the first importance

The mind is very corruptible, but it is also free, and its freedom makes possible most of the glories of the human inheritance. Let it go where it likes; follow the argument wherever it leads; study whatever draws its inclination or sense of what is worthwhile. Do not hamper it with injunctions, censorship, pronouncements by government that x (Lysenko? Engels? the Athenian Creed?) is a "truth" unquestionable.

This is a moral axiom of the first importance and never to be forgotten. In spite of everything else which afterwards has to be said to qualify his freedom. When the Nazis took hold of German universities, they ruled it to be a necessity for the welfare of the state that every undergraduate must understand race theory, and they provided books and equipment and courses to this end. The objection to this plan was not only that the race theory then taught was wrong, or that nearly all the professors who taught it were unworthy; not only that the course was directed to making students think more highly of one race and less highly of other races, and therefore was of a corrupt form of education, being directed not to truth but to politics; we ought to be very careful if any government says: you must study this, or you must not study that.

The nineteenth century believed that it could compel everyone to learn to read and write; for they would remain at such a disadvantage unless they had these accomplishments. Nothing would prevent the twenty-first century depicting



Looking beyond two cultures

ing that everyone must learn to handle keyboards, because they will remain at a disadvantage without that proficiency. But these are not parallel with race theory. They are, not learning or science, but tools for acquiring learning and science - as well as for acquiring much else.

We compel everyone to stay at school till 16, and they learn more than reading and writing. Other things will be of advantage to them - the ability to handle their own language, which will be helped by a part-knowledge of at least one other language, numeracy; and, more generally, a sharing in the common cultural inheritance of the society in which they grow - by means of history, and literature, and religion, and perhaps music, and perhaps art, and certainly the methods of the sciences. I naturally rejoice at the recent speech of Sir Keith Joseph about the necessity for the study of history. The axiom of freedom for the mind does not preclude the desire that everyone shall have the basic equipments for any mind, free or enslaved.

This sense of the mind's innate freedom is a far cry from the University Grants Committee but is the origin of its raison d'être. Its present chairman has asked universities whether they have advice to offer about it. At the moment some inside universities see it as only an instrument of government, which is the freedom of higher education, which it was founded to protect, is now in illusion.

It is possible to foresee times and circumstances where such gloom might be justified. It is not justified yet. Our contemporary universities ought not to undervalue either the underlying axiom of freedom of which the University Grants Committee is a symbol, nor what the UGC can do in practice to help universities by representing their opinions and needs to government. An indispensable part of its efficacy lies in the chairman being an academic rather than a civil servant, and in good men and women, busy in posts at universities, being prepared to give up their time to serve as members to the benefit of us all.

What does the state need? The experts say that too many future doctors and dentists are in training. Anyone who remembers the Willink report and its fate knows how these needs fluctuate unpredictably. But no one can say that the proposed widening of the sciences can be justified by any national need to train more of the most beneficent of scientists: it is extraordinarily difficult to predict vocational need even a few years ahead; so the professionals in the careers services tell us.

What does the employer need? The ability to work with other people; numeracy; the ability to speak clearly, and the ability to write clearly. Everything else most employers can teach in the apprenticeship. There is no special preference for science versus arts in this. The scientist may be more numerous, the arts student clearer in expression. But I have known scientists who could not handle numbers, and arts students who were as articulate as cod.

There are certain jobs of high importance to the country, where scientific training is essential - electronic engineers being the most obvious. There are other jobs, of no less importance to the country, where an arts training is essential - the ability to speak a foreign language being the most obvious.

This last need of the country ought to concern us, and ought to concern the UGC, and ought to concern the linguistic equipments of young people in this country are declining. Why this should be so in so European and international a world, where travel is so easy, is a mystery. But to find people able in one or more languages is an urgent need for the country. If a swing towards the sciences produces more mediocre botanists and fewer linguists it would be no gain to the country.

Balance of skills and personal attributes

On the question of a shift in graduates towards "technological, scientific and engineering courses and towards other vocationally relevant forms of study", the chairman of the UGC himself says that the particular difficulty which is itself almost fatal to a directed shift (as distinct from a natural shift, in what young people want to study) - that it is totally unacceptable to accept only qualified candidates when more highly qualified candidates are available. And even if it were not unacceptable in principle, it is not useful in practice. By the kindness of W. P. Kirkman, head of the Cambridge University Career Service, I am able to find out that the numerical provisions of the new blood scheme were very odd.

The idea of new blood was right, nothing could be righter. If we choke off the coming generation of academic leaders we are in for decline. We must make some provision that this shall not happen. The recognition that we need new blood continually must never be lost. But certainly we need a system adapted, or different from the system which so far we have experienced. The proper course is not to press universities to shift their balance away from arts and social studies towards the natural sciences. Let the pressure come from lower down, that is, the young. Let young minds respond to the great intellectual challenges of their time. Those challenges are not all scientific. Sir Keith Joseph wants to make a broader curriculum possible in the upper forms of schools. Provided he does not mean to make us all woolly - the pleasure of being an intellectual aged 17 is that of being able at last to know a lot about something, and even of fancying that you know more about something than you do - he must surely be right. We need more possibility of mobility in intellectual apprehension; more possibility of converting from one discipline towards another. I am thankful not to be a schoolmaster or an admissions tutor planning the chance of such mobility while refusing to let the growing minds be content with superficiality. But I am also thankful that some people are hard at work on so difficult an assignment.

Any scheme which makes universities choose bad scientists instead of reasonable arts candidates is a very bad scheme. And it frustrates its own purposes. The incompetent theoretical physicists' might have developed a more logical mind for himself but as such is no use to the nation. The incompetent student of modern languages has at least a chance of being useful in the tourist trade. Neither the nation nor the employer; neither in-

dustry nor commerce, needs people who are no good, whatever they are good at. It needs people who are capable and critical; and it is far more important to the nation that they should study one particular set of subjects where they have learnt to be capable and critical.

Part of the same push towards the sciences, which I hold to be of doubtful value to the country at the present moment, could be seen in the organization of the scheme for New Blood posts. It was easy to see why some New Blood posts were allocated to information technology, and easy to justify that allocation. It was harder to see reason why there should be many more posts available in the natural sciences than in the arts and social sciences. To justify it, one would have to plead arguments which do not hold water for an instant eg there are no more young scientists than young scholars in the arts faculties struggling for bread; or it will be much worse for the country if, say, the promising young chemists or physicists do not find posts than if the promising young linguists or economists do not; or, at its most absurd, there is a national need to encourage paleontology whereas there is no national need to encourage the archaeology of prehistoric times. It has to be found that the numerical provisions of the new blood scheme were very odd.

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When to expect your Visitor

A dispute between the University of Essex and a student is soon to be heard by the Lord Chancellor acting as Visitor to the university. This ancient office was originally instituted by the founder of an eleemosynary corporation (the Crown in the case of the universities) to supervise his foundation to ensure that it was administered according to his wishes laid down in the statutes. The courts have held that the Visitor has power to decide disputes relating to the purely internal proceedings of the foundation, but has no jurisdiction over any matter governed by the common law or relating to a breach of trust.

The difficulty has been to separate domestic issues from those of an external nature. In Patel v University of Bradford in 1978, the decision of the University Senate to exclude a student who had twice failed examinations was held to be a matter for the Visitor, but it was said that the university could have sought an injunction from the courts to exclude the student physically from the campus as long as the exclusion stood. In Casson v University of Aston in 1983, the Lord Chancellor as Visitor decided that an action by two students who complained that the university had committed a breach of contract by withdrawing a course after it had accepted the students to study on it should not have been referred to the Visitor as it was essentially a contract dispute for the county court to determine.

The distinction is probably between purely academic decisions based on the student's performance as assessed by the examiners, and matters related to the standard of teaching and administration which the student can reasonably expect. If the university fails to provide a reasonable standard of instruction, or injures a student by failing to maintain reasonably safe buildings and equipment, or fails to provide the facilities promised in the prospectus on the faith of which the student signed up for the course, an action could proceed in the ordinary courts for breach of contract or tort.

The advantage to universities of the office of Visitor is that proceedings before him are less formal and cheaper than court proceedings, that they can be heard in private, and that no appeal lies from his decisions. However, a student who falls before the Visitor, may complain to the civil court that the matter should not have been heard by him and in that way reopen the case, assuming that the court agrees that he had no jurisdiction.

If no Visitor has been appointed, or if a Visitor has died without being replaced, the Lord Chancellor can exercise visitatorial powers on behalf of the Queen.

The office of Visitor might also be relevant in disputes involving employees of the university, though where matters of employment protection legislation or contracts of employment are concerned he probably has no jurisdiction. The difficult cases would be applications for promotion or tenure. In a New Zealand case in 1969 a lecturer who was refused promotion went to the civil court and was not turned away in favour of the Visitor, though the case was eventually dropped. He was complaining that the university had followed the wrong procedure, not that his academic abilities had been wrongly assessed. He would have had small chance of succeeding on the latter ground since the courts, as in the case of students, would be unwilling to enter the arena of academic assessment.

Diana Kloss

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Putting politics in the shop window

Michael J. Thomas traces the ethical issues in marketing politicians

Can politicians be marketed like soap? Should politicians be marketed like soap? The starting point is to ask the question, what is marketing? Marketing I, the conventional wisdom, is that activity which facilitates the voluntary exchange of values, or more simply, it is the "management process responsible for identifying, anticipating and satisfying customer requirements profitably", to quote the Institute of Marketing's definition.

Thus the customer is the central focus, and serving the customer the central activity. Marketing viewed in this way is ethically neutral, since to all intents and purposes, if there is a market out there, supplying the needs of that market is the proper business of business. This definition of marketing appears to have little relevance to the world of politics.

The alternative definition, Marketing II, is the technology for inducing behavioural change; the central focus is convincing consumers that you have what they desire and persuading the central activity. If this second definition is acceptable, it is clearly relevant to politics, since political marketing is about persuading people to keep (or change) their allegiance to a party. Marketing in this context is ethically loaded, since the following questions are immediately raised: should we persuade? are the techniques we use proper? should I (as a market researcher) offer the tools for obtaining information that may then be used for securing behavioural change if I have to control over the way in which the information is used?

Many arguments can be made to support the contention that the dialogue of politics stands to benefit from the application of "marketing" knowledge. If political parties are able to investigate what it is that consumers (voters) need and develop products

(policies) to meet such needs, then the democratic process is well served. But that argument reflects my first definition of marketing, not my second. The ethical dilemma is underlined if my second definition of marketing applies.

There are two types of opinion polls in use during an election campaign: those that are published or reported on television (public opinion polls) and those that are conducted by the political parties for their own use (private opinion polls).

The publication of poll results on a daily basis by most newspapers, and on television, can be seen to have both direct and indirect effects. The first direct effect, it is argued, is that voters are diverted from issues, and instead come to regard the election as a kind of horse race - each poll reporting on where the horses are at each stage in the race.

The horse race atmosphere influences voter behaviour in a number of ways. If one candidate is clearly leading, potential support for opposition candidates may diminish because voters become discouraged. The leading candidate may see his supporters' enthusiasm diminish because they assume he or she is home and dry. Senator Mondale's defeat in the New Hampshire primary may be attributable to this factor. Undecided voters may decide in the leading candidate's favour because they do not want to back a loser - the bandwagon effect. Other undecided voters may vote for opposition candidates because of sympathy for the underdog. Some voters may make a decision to support one of the candidates simply because they think everyone else is supporting that candidate - the copycat effect.

Other issues can be raised. The publication of polls is an invasion of the voter's privacy, for one effect is to



place before each voter information about the pre-election decisions of a sample of other voters, when the voter should be left alone to ponder the issues. The counter-argument is of course that politicians should know about the state of public opinion so that they may respond creatively to that information. Since that information is given wide publicity it cannot *per se* be a tool of social control (in comparison with the survey intelligence gathered by private opinion polls).

Finally, we may observe that opinion polls both public and private are far from perfect technically, for at least three reasons. The basis of sampling in most political opinion polls provides no sound theoretical basis for estimating sampling error. Second, the concentration of British elections into at most a four-week period puts enormous pressure on field workers to complete their interviewing quotas on a daily basis. Third, given that most market research interviews come from middle-class backgrounds, interviewers may distort results. Professional polling organizations are sensitive to all these points, but as critics of technique they are valid. I readily acknowledge that in 1983 the major polling organizations produced fore-

casts of the election result that were remarkably accurate.

Private opinion polls are commissioned by all the major political parties, and the use to which the information obtained may be put is illustrated in respect of five points.

Campaign strategy. Each party and its candidates should know what voters are most concerned about and what issues are likely to get them out to vote. The techniques of concept testing, widely used in new product development, have been very successfully applied to the process of identifying the issues that most concern voters.

Candidate image. In America, candidates employ opinion polls to obtain information on their own and their opponents' images in respect of factors such as perceived honesty, experience, knowledge of the issues, etc. In this country it is likely that "image research" has been confined to party leaders only.

Candidate strength. Private opinion polls can clearly be seen to be in use, albeit often in the crude form of door-to-door canvassing, for the purpose of ascertaining where a candidate's strengths and weaknesses lie. In marketing terms this should lead to market segmentation analysis, and the development of relevant (product)

mixes for each segment. Direct mail communication is highly developed in America; politics as a tool for market segmentation: cable television will in future make possible very direct communication by candidates narrow-casting to various market (voter) segments.

Party preference. Canvassing is the traditional British way of searching for the loyal (curs to be provided), the key (polite withdrawal) and the wide (cited). It is the last category that needs to be identified, and private opinion polling can obviously locate the undecided, after which the troops go in.

Attitude tracking studies. These have been pioneered in the market sector and have shown their value as being sensitive indicators of changing consumer attitudes over time. Private political opinion polling can help political parties to track attitudes toward their performance in office, and help define the major policy issues prior to party conferences.

It is clear that much opinion polling activity is likely to increase the information available to political parties. The ethical problem is also obvious. The pollsters, skilled in their art, produce this information, but either have no control over how the information is used, or else have their independence compromised by becoming involved in policy decision-making. The signing of a contract and the objectivity are made, indeed some would regard it as a hallmark of their profession. The private pollsters and the party advertising agencies would make no claim to objectivity.

In conclusion, the last election clearly showed that at least one political party has full embraced the marketing technology - its campaign (as analysed on the Panorama programme "The Marketing of Margaret", *London*, June 16, 1983) was the very model of good product management backed up by excellent market research and first class communications. Who can judge if that marketing effort was an example of Marketing I or Marketing II? If it is a prime example of Marketing II, what problems does that pose for our democratic processes? Can politicians be marketed like soap? Should politicians be marketed like soap?

The author is senior lecturer in the department of marketing at the University of Lancaster.

Understanding each other

Alan Wilson looks at the vexed issue of university resource allocation

For example, face the problems of all those involved in a variety of ways in lay government. They are not themselves expert in any of the fields to which their decisions relate - and if they are, they are asked to leave the room - and yet they have to acquire the knowledge on which to base satisfactory, defensible decisions. I started to think that here was another area where, ideally, some kind of interdisciplinary knowledge was needed. How could it be generated and presented? To be able to answer this question, I start with two general principles which I assume can be accepted without discussion; and then see what insights we can gain by exploring other institutions.

The two principles are: first, that effective public control involves "lay" government; and secondly that the procedures associated with this should be as open as possible. A subsidiary principle is that the members of the governing authority should be supported by whatever advice, information or knowledge will enable them to make good decisions. The principles, however imperfectly, can be seen at work in national and local government. Politicians are the lay members. The decision-making mechanisms in each case differ. The focus at the national level is the minister operating with the consent of Cabinet and Parliament; the focus at the local level is the committee (which perhaps the chairperson having special influence) operating with the consent of the council.

In each case, the support comes from a civil service, the top rank of which, at least in the national case, is also "lay" - some would say anti-lay - but which has access to professional advice and services. The procedures are more or less open and subject to continual investigation and scrutiny by the press. There are many other institutions where the principle of lay government is preserved - health authorities, for example, where although the public authority provides important checks and safeguards,

much of the time it acts as a rubber stamp on professional recommendations. Universities lie somewhere in between political agencies of government and agencies dominated by single professional concerns like health authorities. Formal public control is established through university councils which, though valuable sources of contact with local communities, are likely to be rubber stamps in the decision-making process. In academic decision-making and resource allocation, the senate acts like Parliament or a local council and the decision-taking rests mainly with the committees.

At this level, the interests of a large number of disciplines - organized in departments - are scantily represented by a relatively small number of members of, say, the senate's planning committee. These committee members are the lay members in the resource-allocation procedure as perceived by departments.

We now get to the nub of the issue: how are the supported with advice and information? The "civil service" is the registry. The registrar and his or her officers will provide statistics, draft the papers to senate representation, the committee's deliberations and decisions, tell us what is needed to make the machine run. But they cannot provide professional advice about developments in disciplines and departments.

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examined in a little more detail how a university can shape its academic direction. Departments have a considerable degree of autonomy and are likely to have guarantees of some sort of formula-based support for current activities. On the whole, in the present climate, change can only come about through assessments which take place when a member of staff leaves. In my own university, there is a special group on staff vacancies, a sub-committee of planning committee, which looks at all cases for replacement. More radically, when a professor leaves, a special group will usually be set up on the filing of that chair and, on occasions, its activities can virtually be a review of the department.

The logic of this analysis is that there should be effective coordination relating the broad formulation of academic policy to the machinery of reviewing academic vacancies, to special groups on chairs and departments and to appointing committees. This coordination could only be achieved through the generation and availability of information and knowledge about progress and problems in different disciplines. A substantial note of caution has to be inserted here: this is not an argument for centralist direction of departments. This information must be generated in such a way that it supports the variety of approaches to the development of a discipline.

It is worth recalling that if this kind of broader knowledge is not available as a background for decision-taking, then the alternative is debate based on impressions, labels and elementary statistical information. The result will, in some cases, be the maintenance of an unsatisfactory status quo (because it is the present department which is supplying the supporting evidence); in others, the unpredictable outcome of a power struggle between different factions of a committee. Can we do any better? The logic of the preceding argument is that universities need better professional advice - and, variety of it - on potential developments in disciplines and departments.

This suggests that at the time a special group is set up to review a department, say when a chair becomes vacant, advice from colleagues in other universities (and beyond) should be sought more actively than is common.

But this is not likely to be enough. It might be difficult in any case to supply enough advisers to meet the needs of a large number of universities. A more centrally-organized review might be both more efficient and valuable. Learned and professional societies provide an obvious possibility; research councils another.

With the context of a particular university, the planning committee group would then have background papers from this national (event international) activity and the department involved could state its own objectives and set them in and against this wider context. Some of the contributions produced would be specialist papers within disciplines; but it would be essential that some should be written in such a way as to encourage lay readership; to go even further, to encourage committee members to acquire inter-disciplinary knowledge which will improve the direction of academic development. Of course, even if the papers are available, there is no guarantee that members will choose to use them. Indeed, the wide proposal may be seen as utopian. But at least it may encourage committees to be aware of William Coopers' dictum: "Knowledge is power; wisdom is the knowledge of how to use it."

There is a corollary argument at resource allocation. It could equally well be applied at the next tier up and commended to the UGC. If more support was in public circulation about the future of disciplines, then the more justification there would be for making the basis of some of the UGC's decisions more explicit - provided, of course, we can learn how to maintain variety and not simply create bandwagons on which less informed departments and universities might jump.

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The publishing explosion

Peter Curwen on the rising tide of new titles in print

In 1957 more than 20,000 titles were published in the UK for the first time, and concern began to be expressed about the economic implications of this landmark figure. It took until 1962 for the total to exceed 25,000, a further six years to exceed 30,000, and five more years to exceed 35,000.

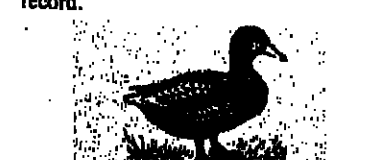
Four years later, in 1977, the total was only marginally higher at 36,322, of which 27,684 were new titles, and some kind of equilibrium appeared to have been reached. After only two further years had passed, however, the total had grown to 41,940 and of these 32,854 were new titles. Yet in the face of a clearly deepening recession the total surged again in 1980 to a record figure of 48,158 titles, of which 37,382 were new books.

Some commentators, myself included, expressed their growing concern at what appeared to be a recipe for bankruptcy, although it was to be recognized that due to the gap between the signing of a contract and the appearance of the finished product, many contracts had been signed in what were rather more prosperous times.

Our main concern was, therefore, to advise publishers to cut back sharply on their publishing programmes, and in 1981, to widespread relief, the total number of titles published did indeed fall to 43,083, of which 33,696 were new titles. It was suggested in certain quarters that publishers were "going sane", although in truth these titles were still the second highest ever recorded, and hence no great contraction to speak of compared to the general experience of UK industry at that time.

In any event, the relief was short-lived, for in 1982 a new record of 48,307 titles was established, together with a record number of new titles standing at 37,947. Clearly, at this juncture, the excuse that the contracts had been signed in happier times was no longer valid.

There were signs during the early part of 1983 that title output was going to fall back again, as in 1981, but this hope was not fulfilled, for the total number of titles published in 1983 rose yet again to a new record of 51,071, of which 38,980 were new titles, also a record.



It is interesting to speculate on why this has happened, and what the consequences might be. It is possible to provide an answer to the first question by analysing the aggregated data on titles published by imprints which appears twice yearly in *The Bookseller*; this data is based upon the journal's weekly list of publications.

Several years ago, at a time when intuition was considered somewhat superior to research in publishing circles, a dispute arose about the origins of the rapidly growing number of titles published. The group publishing director of Pitman, in particular, complained that the blame for the increased output of titles should not be placed at the door of UK-based imprints, and that the reason this was happening resulted from a failure to distinguish whether titles were originated in the UK or abroad. The editors of *The Bookseller*, however, considered this distinction to be fairly immaterial.

Out of curiosity I compiled a list of the largest 100 producers of new titles in the UK, ranked according to the number of new titles produced. Re-adding new editions were not taken into account primarily because it can never by anything other than economically sensible to produce titles for

which a significant continuous demand is known to exist.

Ranking imprints according to the number of new titles published is an unorthodox way of measuring the importance of firms, but it must be borne in mind that publishing is an unusual industry in so far as it holds in stock a backlog of several hundred thousand products, and adds to it at the current rate of nearly 40,000 new products each year.

Furthermore, there is no single market for books, but rather a number of distinct sub-markets such as that for higher education, and it is unwise to place too much emphasis upon turnover or sales volume since a single bestseller can bias enormously an imprint's performance in any single year. Ultimately, the number of new titles being produced is the best guide to whether or not an imprint is bullish or bearish about its prospects in the market place, and hence to whether or not it appears to be acting sensibly in the context of the prevailing market conditions.

Although there are some 2,000 imprints publishing in the UK, the 100 producing the largest number of new titles produce roughly one half of all the new titles. Some concentration ratios are set out in the table.

As can be seen the ratios were generally noticeably lower in 1977 compared to 1971, and during the period 1977/80 they continued to decline steadily. Nineteen eighty-one saw a fairly sharp increase across the board, but the subsequent decline in 1982 was less marked at the lower end of the distribution, and more marked at the upper end. In 1983 the top end of the distribution again rose sharply, but at the lower end, by contrast, exceptionally low ratios appeared.

This top end effect can be ascribed entirely to the entry into the ranking of the University Press of America, with a total of 1,631 new books, a figure which can only be put into perspective in the light of the fact that no other imprint had ever previously published more than 900 new titles in any single year. Because of this, therefore, the decline at the bottom end was more marked than it appeared to be at first sight.

Further analysis of the changes in different sections of the top 100 ranking shows, first, that between 1978 and 1980 the general picture was one of imprints expanding more slowly than the imprints taken as a whole, with the most notable exceptions appearing among the imprints ranked 4 to 25 in 1979 and 4 to 10 in 1980. It must be concluded, therefore, that the largest imprints were generally more circumspect than their smaller brethren as the recession approached, although the figures hardly suggest massive cut-backs.

In 1981 no part of the top 100 shrank by as much as the market as a whole, and the biggest imprints grew overall. This may, in part, have been a reaction to the comparatively slow growth of the previous year, although it does not once again lend any great support for the view that the largest imprints as a whole were behaving in a circumspect manner.

In 1982, however, no part of the top 100 ranking rose as fast as the total, although the differences were not very large. Overall, therefore, the picture shows a headier part than imprints as a whole, although this may simply reflect the fact that for a small publisher, a relatively small change in the absolute

number of new books published represents a relatively large proportional change.

In 1983 too much should not be read into the sharp changes at the top end of the ranking for the reason stated above, but it is clear that the bottom half of the ranking was behaving relatively cautiously.

Of the top 100 imprints in 1983 exactly 60 expanded their new title output during 1983, and of those 55 had also expanded during 1982. The equivalent figures for 1982 were 70 and 38 respectively, for 1981 they were 53 and 33, and for 1980 they were 66 and 36. Nineteen eighty-one was, therefore, less expansionary than 1980 among the largest imprints, although one may pause to wonder how many other industries were characterized by over half of the largest firms expanding their new product range through the recession.



Nevertheless, the deepening of the recession in 1982 appears to have stimulated a collective rush of blood to the head, with 70 per cent of the largest imprints embarked upon an expansionary path, an even higher proportion than in 1980 when it could at least be argued in mitigation that the contracts had been signed before the recession had begun to bite at all hard. Furthermore, the contracts for most of the books which appeared in 1983 must have been signed before there was any real consensus that demand would be more buoyant at the time of publication. Now publishers may, perhaps, be more farsighted than the rest of us, but if so one may wonder why they did not use this foresight rather better in anticipating the scale of the recession.

One must, however, be careful at this juncture to distinguish which imprints were to blame for this behaviour. To begin with, we need to take account of the fact that whereas 21 of the 1980 top 100 ranking failed to appear in that of 1981, a figure close to previous experience, the replacement rate rose to 25 in 1982, and to a record 27 in 1983.

Of the 27 that appeared in the 1982 ranking but not in that of 1983 only seven were UK-based, the 20 foreign-based imprints which disappeared being almost entirely American imprints. This contrasted sharply with the 25 new imprints which entered the ranking in 1982, of which 24 were foreign-based, and where these displaced a majority of UK-based imprints. Not surprisingly, a good many of the 20 foreign-based imprints which were displaced from the ranking in 1983 were numbered among the 24 which had entered only the year before.

This phenomenon of foreign-based imprints appearing out of the blue on a large scale, only to disappear again, in most cases within the year, tends to arise to some extent in every year as a result of foreign-based imprints making an agreement with a distributor to handle the imprints' entire list of publications.

Nevertheless, this was traditionally a low-key process and the 1982 experience, when the top 100 ended up ranking 19 American university presses, between them contributing over 6 per cent of total new book output, was quite exceptional. It happens that nearly as many wholly new foreign imprints appeared in 1983 as in 1982, but one thing is clear: they did not all come from the USA, and such a large number of those leaving the ranking were American university presses that only seven remained in the ranking in 1983, of whom five had long been there.

It is true that the scale of the entry of

the University Press of America very nearly made up for the difference in numbers, but that should not be allowed to distract us from the overall picture, and when one bears in mind that the number of foreign-based imprints actually declined in 1981, suggesting a tactical withdrawal in the face of a declining market, the 1982 in-rush becomes rather difficult to explain.

We can assess the degree to which this in-rush accounted for the surge in new titles overall in 1983 by comparing the expansion rates of UK-based and foreign-based imprints.

Of the 59 UK imprints in the 1983 top 100 ranking 35 (59 per cent) had expanded during 1983 and 30 (51 per cent) had expanded the previous year.

It should be noted that of the 35 expanding during 1983 it was primarily the large ones which did so. The equivalent figures for the 54 UK-based imprints in 1982 were 37 per cent and 42 per cent respectively, and for the 67 UK-based imprints in 1981 they were 46 per cent and 51 per cent respectively. In absolute terms virtually the same number of imprints expanded in 1981, 1982, and 1983, although the proportion was much lower in 1981.

In some respects UK imprints do not come out of this analysis too badly. Certainly 14 UK imprints disappeared from the 1982 top 100 ranking by virtue of cutting back their output during 1982, and of those which did expand in 1982, many had cut back the previous year. On the other hand, with over half of the most prolific UK imprints still trying to control very difficult trading conditions through a policy of output expansion, one may find it a little difficult to provide a rationale for their behaviour, especially as the average rate of expansion was over 20 per cent.

Much the same expansionary outlook was evident during 1983, although by then rather more optimistic noises about trading conditions were being heard. Of the 20 largest UK imprints, which were in general more expansion-minded than their smaller brethren, 11 produced what for them was a record number of new publications. This might again be considered to be going over the top somewhat, given that demand was still not at its historic highest level in the economy.

The behaviour of the foreign-based imprints tends to put the above figures into a more conservative context. Of the 41 foreign-based imprints in the 1983 top 100 ranking 26 (63 per cent) expanded during 1983 and 27 (66 per cent) expanded during 1982. The equivalent figures for the 46 imprints in 1982 were 85 per cent and 26 per cent respectively, and for the 33 imprints in 1981 they were 67 per cent and 64 per cent respectively.

The extremely high percentage which expanded in 1982 was associated with the highest ever absolute number of imprints in the top 100 ranking. Of these, as previously mentioned, 24 were new entrants, but 15 of the 22 which survived from the 1981 top 100 also chose to expand, ranging from the biggest to the smallest. It must further be borne in mind that most foreign-based imprints had been in an expansionary mood during the previous two years, so we must obviously be given to wonder why this happened, and why, despite this ongoing expansion, there was still more expansion in 1983.

Clearly, the fact that a higher proportion of foreign-based imprints than of UK-based imprints expand in every year primarily reflects the fact that many enter the ranking never having previously appeared in it, whereas many of the UK-based imprints move in and out of the bottom end of the ranking.

Nevertheless, the decision of so many foreign-based imprints, and especially American university presses, to enter the UK market in recent years is difficult to understand. It may be argued that the recession in the US market drove such imprints to seek sunnier climes. If so, the UK market would hardly seem to have offered all

that much sun, even if English of a kind is spoken there, and just how many copies per title could the University Press of America have sensibly expected to sell when it exported 1,630 titles in one fell swoop?

So far we have seen that the sharp increase in output in 1980 resulted primarily from an expansionist policy pursued by relatively small firms, and among the larger imprints, by those that were foreign-based. The evidence from 1981 was that the contraction in output was not an across the board affair, but resulted from the conflicting pressures exerted by those which were expanding and those which were not.

Nineteen eighty-two saw a repeat of the 1981 experience, but in a more exaggerated manner. Most UK-based imprints pulled in their horns, although one would be interested to know what motivated those which embarked upon a highly expansionary path.

Nineteen eighty-three was a curious year. Most of the influx of US university presses failed to add to their lists in any significant way, and America in general exported rather fewer titles than in 1982. Nevertheless, there are still, by historic standards, an unusually large number of foreign-based imprints in the top 100 ranking, and it is too early to say whether the traditional relationship will be restored.

What, then, are the prospects for 1984? If we interpret the implications for 1984 as indicating that UK-based imprints are becoming more expansion minded as the recession slowly lifts, then we can only be saved from yet another record total if foreign-based imprints stay more at home, perhaps because their own internal markets are themselves more buoyant.

Even that may not be enough, however, when the likes of the University Press of America export tens of thousands of new titles, and Haskell House Publishers in the case of reprints, can between them pitch over 3,000 titles into the UK market in the course of a single year. That the UK market should be expected to absorb nearly 40,000 new titles a year is frankly almost beyond belief, since we are not anyway a nation of great book buyers, and public expenditure upon the library system is on the wane.



Of course there are those who will regard this multitude of titles as a splendid development. No doubt most printers will be numbered among them. But what are the implications for the UK publishing industry in general, and for book-buyers, both academic and general?

The most obvious point is that if the overall market is growing more slowly than the number of titles, then sales per title must be declining. Faced by this the publisher inevitably must cut down on his print runs, thereby causing his overheads to be spread more thinly and hence his prices to rise. The outcome of this is rather unpredictable since each book is a unique purchase, and successful pricing is by no means a simple matter. However, those of us who like to see our students purchase the odd book are unlikely to regard the inexorable rise in price per page with equanimity.

It is also the case that American imprints will inevitably look attractive, for with their overheads largely carried by their US sale they can be brought into Britain at an attractive price per page. It is possible that the low exchange rate is the only thing which can stem the tide in this respect although it clearly hasn't stopped us and often foreign publishers from chancing their arm in the UK market in a big way.

In the light of this one must hope that the worst of the import surge is now over, or that, inappropiate though it may seem, UK publishers will rest rather more upon their backlist laurels.

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Percentage of New Titles Produced by Number of Imprints

	1971	1977	1978	1979	1980	1981	1982	1983
(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)	(%)
3-Firm Ratio	6.7	8.0	6.8	5.6	5.4	6.8	8.4	8.0
10-Firm Ratio	15.7	14.9	14.3	14.7	14.9	16.8	15.9	17.1
20-Firm Ratio	28.7	24.8	24.0	25.2	24.5	28.4	25.1	27.9
50-Firm Ratio	40.9	35.7	35.0	38.0	34.0	36.0	32.6	35.2
75-Firm Ratio	48.5	43.7	43.1	42.8	40.4	42.1	42.4	41.9
100-Firm Ratio	55.0	46.8	49.4	48.5	47.0	48.9	48.1	48.1

BOOKS

The evolution of marriage

by George Holmes

The Knight, the Lady and the Priest: the making of modern marriage in medieval France
by Georges Duby
translated by Barbara Bray
Allen Lane, £14.95
ISBN 0 7139 1583 8

One of the men whose writings are used to illuminate the medieval marriage bed in Georges Duby's very interesting book is an elderly monk, Guibert of Nogent, who in 1115 composed a book of reminiscences in which he recalled the trials of the life of his own mother.

She was betrothed to his father, a knight of rather lower social status than himself, when she was twelve and went to live in his house, though too young to be properly married. The bridegroom and his relations apparently decided nevertheless that they wanted a quick marriage and an heir so they did their best to get rid of her. They humiliated her in the hope that she would run away. They encouraged her to be unfaithful. Guibert thought that his father's stepmother used secrecy against the girl. The betrothed husband took a socially inferior concubine who bore him a child but the child died. Eventually, however, the couple came together, the wife submitted to the husband and bore him four sons, the last of whom was the Guibert who told the story. Soon after this the husband died.

In widowhood she was faced with a new set of trials. She had a widow's power over her dower and her sons. Her husband's family wanted to dispose of her. They tried to marry her off. She resisted this by demanding that she should be married to someone socially superior to herself, a demand which they found difficult to resist. But she was really committed to unmarried widowhood and, increasingly, to the religious life. She adopted a baby as a contribution to redeeming her dead husband's begetting a bastard. She gave away her money, devoted herself to the church and eventually went to live at the gate of a monastery.

The main reaction of readers of Guibert's story, as presented by Duby, may well be the feeling that the French upper classes were already behaving in the eleventh century in much the same beastly way as they behave in the novels of François Mauriac. That is probably true. The differences are first that eleventh-century noble society was physically violent and second that the religious view of life and marriage was maintained not only by pious individuals but also by powerful institutions which could set their wealth and authority against the conventions of lay life.

When he wrote his book Guibert was abbot of Nogent; not a great monastery but still a position that gave him some power. He belonged to the elite of educated writers in a largely illiterate society. He idolized his mother, praising her beauty and chastity. She was linked in his mind with the Virgin. He believed that the commitment of the will in betrothal was more important than the union of bodies. He hated the materialism, violence and sexuality of the lay nobility.



King Philip I and his second wife Queen Bertrade, who were excommunicated in 1094. From the *Grandes Chroniques de France* at the Bibliothèque Nationale.

ity, as he shows when he describes a nearby nobleman Enguerrand Lord of Coucy, who turned out his wife, a fornicator herself, in order to get a son by replacing her with Sybille, wife of the Count of Namur, who was away at the wars. Sexual disorder is in Guibert's eyes the enemy of social order.

Duby is interested in the development of feudal society. The place and time with which he is concerned in this book, northern France approximately from 1000 to 1200, is a world in which he sees the emergence of a nobility and gentry who were committed to legal succession in the male line as against the looser family arrangements of the earlier middle ages. He has described this process in earlier writings and partly relates the evolution of marriage to it. What emerges most strongly in this book however is the dualism which is the key feature of medieval society, the conflict between lay noblemen who must possess women who will bear them sons to inherit their property and, on the other hand, the church devoted to a limited conception of marriage in which marriage within prohibited degrees was incest, living with a concubine, however regular, was fornication, and the spiritual attitudes of the marriage partners were more important than the physical results of union.

This division is of course somewhat emphasized by the fact that we see lay life only through the writings of the

clergy but the division is a real one. It is easy to see why a man like Guibert should admire chastity and loathe physical indulgence. In the twelfth century the attitudes of men like Guibert were supported by enormous landed power which made it perfectly possible for their ideas to be set against the assumptions of lay society and, to a degree, to prevail over them. Hence the evolution of marriage rites which Duby surveys.

Duby begins his book with a famous political story the events of which took place in Guibert's lifetime, the excommunication of King Philip I of France by Pope Urban II in 1095. Philip had been married for over twenty years to Bertrade de Friain. After a long period without children she bore one son who later succeeded Philip as Louis VI. In 1092 after twenty years of marriage, the king rejected her. He looked her up in one of the castles on her dower lands, which remained her property, and took up with another woman, Bertrade, wife of Count Fulk of Anjou. The Count of Anjou was a powerful figure but his attitude to the matter is not made clear. Philip's authority was enough to persuade most of the important clergy in northern France to accept his change of wife and Philip and Bertrade were married with the approval of the Archbishop of Reims. But there was plenty of disapproval too. The bishops of southern France, outside the royal domain and therefore outside the range of the king's anger,

pronounced their excommunication in 1094, as did the Pope in the following year, in the same council in which he proclaimed the first crusade.

Many chroniclers also condemned Philip for various faults ranging from mere submission to a wicked woman, through adultery to incest on the grounds of his relationship to the Count of Anjou. In Duby's view, however, his remarriage was a sensible move which would have been approved by independent-minded laymen of the time because he had only one, rather delicate son of 11 years of age who might not survive him to carry on the great destiny of the Capetian house.

That may well be a correct judgment. Philip had, however, one persistent and intransigent opponent who was responsible for much of the fuss in the church by insisting on the king's lust and by implying that his second wife could only be regarded as a concubine. This was Yves Bishop of Chartres. Yves was the greatest canon lawyer of his age and, quite apart from his involvement in the case of Philip I, his writings made an important contribution to the development of modern views of marriage. He emphasized the spiritual and voluntary aspects of marriage against the importance of the contemplable flesh. He promoted the involvement in marriage by regarding it as a sacrament. He repeatedly condemned the incest of marrying within the prohibited de-

grees. In the eyes of Yves and his like the behaviour, for example, of Count Geoffrey Martel, who in the mid-eleventh century took a series of at least four wives, some closely related to him - a desperate attempt by a sterile man to get a son but a natural and proper approach by a nobleman to the needs of his inheritance - was merely a case of incest and concubinage.

Duby's thesis is that the view of marriage represented by Yves of Chartres gained a good deal of ground during this period. At the political level the needs of alliances and of inheritance remained paramount. At the end of Duby's period the main history of King Philip Augustus, including the famous abandonment of his queen Ingeborg of Denmark after one night, shows a persistent disregard of the church's rules. One wonders whether the marriages of the medieval kings of England and France after Philip Augustus were relatively decent because of the luck of having male heirs rather than out of respect for ecclesiastical sanctions. Lay society did, however, come to accept the church's view of marriage as a sacrament, an essentially religious celebration of an event with religious as well as secular significance.

At the baronial level the interest in succession remained supreme as appears in the twelfth-century histories of the lords of Amboise and the counts of Guines which Duby takes us through. Women existed for the sake of the sons they bore. Duby tells us of a wife who had given birth when imprisoned in a captured castle. She was rescued and carried on her bed "like a holy sacrament" to her husband. He tells us also of the bedroom of the Lord of Ardres in the centre of the castle "like a matrix for the fertilization and germination of seed". No doubt he dramatizes but he succeeds in bringing home to us the existence of the two contrasting streams: the baronial family life and the ecclesiastical attempt to spiritualize it within a system in which chastity was supreme.

The history of marriage and the family is a relatively new pursuit. Twenty years ago it scarcely existed but since then it has blossomed remarkably quickly and luxuriantly. Since Duby's book was published in France in 1981 we have already had Jack Goody's *The Development of the Family and Marriage in Europe* (1983) which attempts to explain the earlier development of those prohibitions of marriage within certain degrees of relationship which figure so frequently in the pronouncements of churchmen in the eleventh and twelfth centuries and which Goody regards as designed to promote gifts of property to the church by restricting the continuity of families. During Duby's later period the major change seems to have been the development of the binding ceremony of marriage, enforced and interpreted by churchmen. What happened at the lower levels of society we are unlikely ever to know because no documents exist to tell us about it but Duby has displayed for us splendidly the attitudes to be found among the nobles and gentry, the bishops and the writers.

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Mother church

The Early History of the Church of Canterbury: Christ Church from 597 to 1666
by Nicholas Brooks
Leicester University Press, £28.00
ISBN 0 7185 1824 4

Much of the early history of the church of Canterbury was first written shortly after the Norman conquest, in a time of bitter strife, to bolster the claims of the archbishops of Canterbury and the monks of St Augustine's and the monks of Christ Church for privilege.

Genuine misinterpretation and deliberate forgery spun a web of myth that centuries of more dispassionate investigation have not quite swept away.

But the mother church of Canterbury has, always, attracted historians and antiquaries; now Nicholas Brooks, the latest and best in a distinguished line, has produced a scholarly and fascinating history of the archbishopric he describes as "one of the most astonishing mistakes of English history: a testament both to English pragmatism and to English conservatism". Gregory I had planned a church with metropolises at London and York, and 12 suffragan in each province; circumstances determined that the seat of the first metropolitan see should remain where it was originally established, at Canterbury.

To well-known narrative sources,

Brooks has added the evidence of charters (surprisingly numerous for the ninth century), archaeology, architecture, numismatics and palaeography. His detailed local studies bring general developments in both church and state into sharper focus. Some of his findings are unexpected. Archbishop Wulfred emerges as an outstanding ecclesiastical statesman, whose attempts to reform the proprietary church were defeated by King Coenwulf with papal support. On the vexed question of when monastic life began at Christ Church, Brooks argues that the establishment of Benedictine monks in place of a cathedral clergy, who led a semi-communal life and shared part of the liturgy with the monks of St Augustine's, took place by slow stages. He rejects all the twelfth-century traditions that claimed monastic roots in the time of Archbishop

Laurence (or even Augustine), or alternatively described a dramatic ejection of corrupt monks at some later date. But volume from the cathedral library show that the production of books adapted to the needs of the Benedictine liturgy and a monastic curriculum of study were steadily produced from the early 990s, and suggest that the change, though gradual, then became irreversible. They show a young monastic school designed to foster devotion and obedience rather than intellectual curiosity; paradoxically, the community whose early history has been made familiar in the pages of Bede possessed no copy of his *Ecclesiastical History*.

Canterbury is placed in its contemporary setting: the influence of the Frankish church was at times important, but was always tempered by the older tradition of close reliance on Rome,

use of the Roman liturgy, and respect for an ordered hierarchy in the church. Never isolated, the church of Canterbury still developed a tradition that was peculiarly English. From the first books examined, Brooks examines archaeological sources to show the tenuous links of Augustine's Canterbury with Roman civilization, to the last pages where he places Stigand's disastrous archbishopric in its context of political strife and ecclesiastical change, this splendid book combines meticulous scholarship with illuminating comment. Even the most hasty student, skimming its pages, will gain new insights into every aspect of early English history.

Marjorie Chibnall

Marjorie Chibnall is a fellow of Clare Hall, Cambridge.

BOOKS

Inside the bourgeois artist

Sartre's Existential Biographies
by Michael Scriven
Macmillan, £30.00
ISBN 0 333 31987 7

Although Sartre is primarily renowned for his purely fictional and philosophical writings, his biographical writings constitute a neglected corpus of work that is at least as extensive and as important.

The failure to appreciate their significance has had two unfortunate consequences. First, those interested in the applicability of his "progressive-regressive" method, with its combination of existentialist psychoanalysis and Marxist historical analysis, are insufficiently aware that the biographies are the privileged textual site on which he developed and demonstrated his method. Second, those literature lovers who lament his failure to produce more novels and plays miss the main point of his literary project.

Sartre stopped writing novels in 1949 and after 1965 his literary project focused exclusively on existential biography and *articles agissans* (millitant articles). The reason for this was that in the 1950s he became convinced that the narrative techniques available to the novelist were less structurally adaptable than those of biography in their capacity to absorb Marxist and psychoanalytical techniques for explaining human conduct. He felt that the novel's literary integrity and stylistic excellence would inevitably be destroyed by the introduction of alien methodological systems. Existential biography, applied to those who produced literature, could expose the mystifications of bourgeois cultural practices. Sartre's critical biographies aim to disclose the reasons for the existential choices made by specific authors in their historical context and to show how they communicate the historical contradictions of their time.

Scriven shows that each of Sartre's biographies - of Baudelaire, Genet, Mallarmé, Tintoretto (the painter), Sartre himself and Flaubert - appears to follow a chronological narration from early childhood trauma to a later adult artistic vocation, but that the

structure is really more complex and represents a dialectical search for the global significance of the biographical subject's existential project as it unfolded in the past, and the text unfolds not in a linear fashion but through a progressive-regressive spiral.

The biographic reconstruction is based on a regressive teleology by means of which the origins of an adult artistic vocation are retrospectively "discovered" in the child and then progressively revealed to the reader of the narrative as steps leading to the same adult vocation. The inclusion of the study of Tintoretto does not fit very well into this pattern as Scriven has to stretch his argument to suggest that the city of Venice takes on the role of the mother figure so prominent in the other biographies, and that it is the city that does the rejecting in this case, which is not a very sound psychoanalytical notion.

Critics of Sartre's biographies have objected that they do not conform to the "facts" and that they do not offer an interpretation of the works that is faithful to the original. Scriven is most effective in showing that this was not Sartre's intention. Sartre regarded the artist and his products as replete with ideological connotations and myths, and the best way to expose them was to cover them, or confront them, with another ideological discourse. Such a discourse should not stand outside the subject, but seek to enter into it and draw the reader in, so as the better to create an experiential awareness of its inherent ideological implications. Thus the bourgeois readers find themselves implicated in the Baudelaire myth, and having been led into a feeling of superiority and magnanimity

towards Genet's immorality they are finally told that "Genet is ourselves".

Scriven is at his best in this excellent and lucid book when discussing the biographies of Baudelaire and Genet. He is clearly out of sympathy with Sartre's gigantic and little-read work on Flaubert, even though Sartre saw it as his most important effort to apply his progressive-regressive dialectical method. As someone who admits to having read Sartre for the first time in 1968, and who was attracted by Sartre's appeal for an actively committed literature, Scriven expresses his sense of disappointment that Sartre should have spent so much time on a work which, unlike the committed biographies of Baudelaire and Genet, presents no call to mobilization in the present.

He wishes Sartre had chosen to study an activist in the real world, (for example, Robespierre) which he had mentioned as an alternative possibility, rather than wasting his efforts on a literary figure, Flaubert, who had chosen to live an imaginary existence. But this is to make nonsense of Scriven's own brilliant demonstration that Sartre's peculiar talent was to use effectively his own artistic understanding of the predicament and contradictions of the bourgeois writer, in combination with social scientific methods, for the elucidation of the processes of reproduction of ideology and the imaginary.

Kenneth Thompson

Dr Thompson is reader in sociology at the Open University and co-author of a forthcoming book on Sartre.

Linguistic turmoil

The Italian Language
by Bruno Migliorini, abridged and revised by T. Gwynfor Griffith
Faber, £22.50
ISBN 0 571 18073 5

It will perhaps come as a surprise to many English readers to discover that after the unification of Italy in 1860-61, only 630,000 people out of a total of some 25,000,000 actually spoke the Italian language. The rest were almost exclusively speakers of their local dialects, which - as Professor Gwynfor Griffith points out - often differed from each other as radically as Spanish or Portuguese differ from Italian. In other words, Italy is one of the few countries where a dominant dialect has not automatically blossomed into a national language, but where a largely literary language (mainly the Tuscan of Dante, Petrarch and Boccaccio) has been imposed on the population from above.

It is the history and development of this not very diffuse but nevertheless highly cultivated language which Bruno Migliorini and Griffith traced out in their original work, and a special feature of the present edition is the extension of Professor Griffith's chapter on the modern language to cover the period from 1965 to 1982.

Clearly, because large sections of the population of the new Italy were unable to communicate with each other in 1860s, an enormous leap had to be made; and yet this linguistic miracle, had nowadays, been virtually achieved, since most Italians

are today either bilingual (speaking both dialect and their national tongue) or are even abandoning their dialect and becoming monolingual in Italian. At the outset of the modern period, the most rewarding area of study was the point of contact between the dialects and the national language, the latter having been imposed after unification in the two main activities of the modern state: education and military service.

Their interaction resulted in the creation and consolidation of regional Italian in a variety of forms, in which slang and colloquialisms were frequently borrowed from the dialects and neologisms from abroad, thereby providing a composite colouring for regional speech. With the advent of radio and television, however, these regional forms are themselves now slowly breaking down, while the linguistic centre of gravity of the peninsula is gradually being displaced from Tuscany, the former literary centre, to the administrative centre, Rome.

In his chapter on the modern language, Professor Griffith also examines the microcosm of linguistic change, especially in such areas as advertising, sport, fashion, the press, and even poetry, which still seems rather more adherent to the national language in Italy than in most other European countries. He acknowledges that since the last war the main external pressure has come from Anglo-Saxon sources, which have replaced French ones, both in the lexical field and in the area of syntax.

In a sense the way was cleared for this development by the very excessiveness of the Fascist cult of purity in the interwar years, a cult deriving partly from xenophobia and partly from an obsession with Italian racial integrity. Admittedly, even the Fascists had on occasion to accept neolog-

isms from abroad, but they rarely introduced non-Italian phonic combinations. A modern word like "bikinetto" might thus have just been acceptable, though in an advertisement it might well have incurred a fine; but the postwar flood of terms like "twisteggiare" would no doubt have filled the Fascist purist with horror.

The main contribution of the Fascists to the language was no doubt an empty rhetoric, and the laconic pithiness of English has perhaps been an antidote to this tendency in the post-war world. Hence although, for example, Professor Griffith attributes the origin of multiple-noun combinations in Italian to a telegraphic style which has gradually passed over into speech, there can be no doubt that the process has been greatly accelerated by such recent coinages as "ragazza-copertina" for the English "cover-girl". Even in advertising we can perhaps see a tendency to brevity in an Anglo-Saxon form of sloganizing and some of the examples provided are very amusing. So that, all in all, Italian, like most of the romance languages, seems to be at present in a relative state of turmoil, although this has been kept within bounds and no Italian version of "franglais" yet seems to be in sight.

The one issue in this edition which might prompt some regret is Professor Griffith's decision to offer only minimal revisions of the late Migliorini's contributions. The time is not yet ripe in my view for large-scale revisions in any case; but it is to be hoped that in a future edition Professor Griffith will apply himself to this task.

Frederic Jones

Frederic Jones is professor of Italian Studies at University College, Cardiff.

Critical patriot

Edmund Wilson's America
by George H. Douglas
University Press of Kentucky, £21.85
ISBN 0 8131 1494 2

Two years ago a reviewer in *Le Monde* wrote enthusiastically of "discovering" Edmund Wilson, praising his "tender verve and acid sharpness". Perhaps for this generation Wilson, who died in 1972, does need discovering, especially in Europe. Axel's *Castle* and *The Wound and the Bow*, so seminal in the literary criticism of the 1930s and 1940s, have lost something of their original impact, and for the remainder of his creative life Wilson's preoccupation with the culture of his native land involved at times an aggressive rejection of Europe that rivaled his earlier delight in the Symbolists. Such sentiments as "I have had a good many more uplifting thoughts, creative and expansive visions... in well-equipped American bathrooms than I have ever had in any cathedral" are hardly calculated to endear him to the European reader.

Yet, despite such provocation, those of us who are professionally interested in the study of the United States should find George H. Douglas's *Edmund Wilson's America* particularly useful, for his thesis is that Wilson's reputation will ultimately rest on his critique of American life. Even in the United States, he suggests, Wilson's work in the 1920s and 1930s, "surely among the best examples of American journalistic writing", is "today sadly neglected by students of American literature and history". This is regrettable, because these pieces can usefully correct the popular sentimentalization of the lost generation and the jazz age that derives from an over-sympathetic and exclusive reading of the novels of Hemingway and Scott Fitzgerald.

As early as 1921 Wilson praised H. L. Menckson for never having resigned himself "to the cheapness and ugliness of America". Acutely conscious himself of these qualities in his native land, Wilson too sought idiosyncratically, irritably, and sometimes perversely to define the strength that counterbalanced them. Douglas sees him as having "hoped to find something in European intellectual history and in postrevolutionary Russian experience to revivify what had been lost in American life". His disappointment in this and his disillusion with the Second World War drove Wilson back in on himself and on America in ways that can make his later writings seem quickly and ill-tempered, especially from this side of the Atlantic. Yet throughout his long career, the range of his intellectual curiosity was matched by the rigour of his intellectual honesty and the depth of his essential humanity. You may disagree with his ideas, but it is impossible to dismiss them or not to respect the tough individuality of mind that produced them.

Douglas gives a thorough, if at times pedestrian, account of Wilson's writings on America, relying rather more on summarizing than on analysing them and tending to labour some points by repetition. He is critical of the kind of literary criticism that deals with the author's ideas but denies us "the largest determining factors in the man's makeup - his own conditions of life, the nature of his own personal culture... how he related to or was affected by his friends, what his life-style was like", yet ironically his own book would be better for more emphasis on these factors. His early chapter on Wilson's friendship with Dorothy Parker and Edna St Vincent Millay is promising, but there is little on other friendships. Douglas tells us of Wilson's early family life but of his four marriages virtually nothing, yet it is hard to accept that his wives, especially Mary McCarthy, contributed nothing to Wilson's view of America. Nevertheless, this is very useful as a guide, and the appended bibliographical essay is especially welcome.

Dennis Welland

Dennis Welland was until recently professor of American literature at the University of Manchester.

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BOOKS

Breaking off the party ties

The Rise and Fall of the Political Press in Britain
volume two: the twentieth century
by Stephen Koss
Hamish Hamilton, £25.00
ISBN 0 241 11811 1

Professor Stephen Koss's second volume of the history of the political press in Britain completes a truly prodigious undertaking. The writing of newspaper history is indeed a daunting prospect: the vast, almost unlimited quantities of material, the millions of words and tons of newspaper, the seemingly endless list of editors, proprietors and politicians who participate in their various ways in the world of journalism.

Professor Koss hammers this material into shape by identifying and pursuing a theme: the distinctly political role of the press and its connections with British political parties. This enables him to select, to touch upon newspaper comment, private correspondence, economic and financial developments, party policies, as they relate to or illustrate his theme. This, therefore, is press history written mainly from the inside. The vast uncharted seas of newspaper and their relationship to public opinion are only explored at certain times and in certain circumstances; and, inevitably, the reader searches these pages in vain for a discussion of some important episodes in modern British politics: the Bolshevik scare after 1919, the attitude of public opinion to the empire in the 1930s, to make a couple of random suggestions.

But it would be churlish and unreasonable to expect more. One of the reviewers of Professor Koss's last volume lamented the fact that American historians write long books, but to undertake a study of the press in its many roles would require about twenty volumes and several lifetimes. It is doubtful if even an American of Professor Koss's mettle could manage it. What he has done is to explain how certain important episodes - the 1916 political crisis, the Beaverbrook-Rothermere attack on Baldwin in the 1930s, or whatever - helped shape the political destiny of the British press; his treatment of these events, familiar in themselves, takes on a fresh meaning as they elucidate his theme. And

this book triumphs over its length (718 pages) and its workmanlike (but never dull) style because it offers a comprehensive, thorough treatment of the complex, paradoxical relationship between Fleet Street and Downing Street.

This relationship has altered almost beyond recognition since the days of the political dailies and their great editors, as the press has exchanged its place as a bastion of British party political life for that of an interested, but hardly committed observer. Professor Koss does not devote much space to the provincial press, for, as he rightly observes, few politicians troubled to read the provincial papers; they were, as Neville Chamberlain remarked, "much too busy". In fact the existence of a strong Scottish press (widely praised by southerners, as Professor Koss notes, but never read by them) has played a significant part in shaping the political history of the United Kingdom, for it enabled Scotland to reconcile its sense of nationality and its preoccupation with its own affairs - catered for in its press - with membership of the British political entity. But this London-centred political scene, wider or more narrow as it may be, is Professor Koss's concern.

The result is a book which explains carefully and convincingly the many pressures, economic, political, even personal, that persuaded the metropolitan press gradually to sever its close links with the British party system. Yet even while it was an integral part of the party system, the press always proclaimed its "independence"; and politicians, while publicly praising the virtues of a free press, sought by all the means available ("squearing" and "squashing", as Lloyd George put it, after his blunt fashion) to maintain their influence with the press that was, in theory, a check on their power.

Professor Koss establishes the point that the press and politicians enjoyed a symbiotic, not a mutually antagonistic relationship; and although that relationship is not yet completely exhausted, it was clear that the interwar years it was losing its grip both on the parties and, more especially, on a press anxious to augment its readership, and increasingly aware that party political allegiance was not the means to achieve this desirable, or rather, essential end. Professor Koss suggests various reasons for the decline of the political press: changes in the party system at key moments; the need for newspapers to attract wider circulations (and more affluent readers) in order to compete for advertising and thus pay their way; the rise of the idea of the "professional" journalist, seeking to speak in the name of the public and thus needing to distance himself from overt political partisanship at least. He offers the explanation that, as the political system "lost confidence in itself and in the eyes of an expanding political community, the political press lost its bearings, its justification, and whatever efficacy it

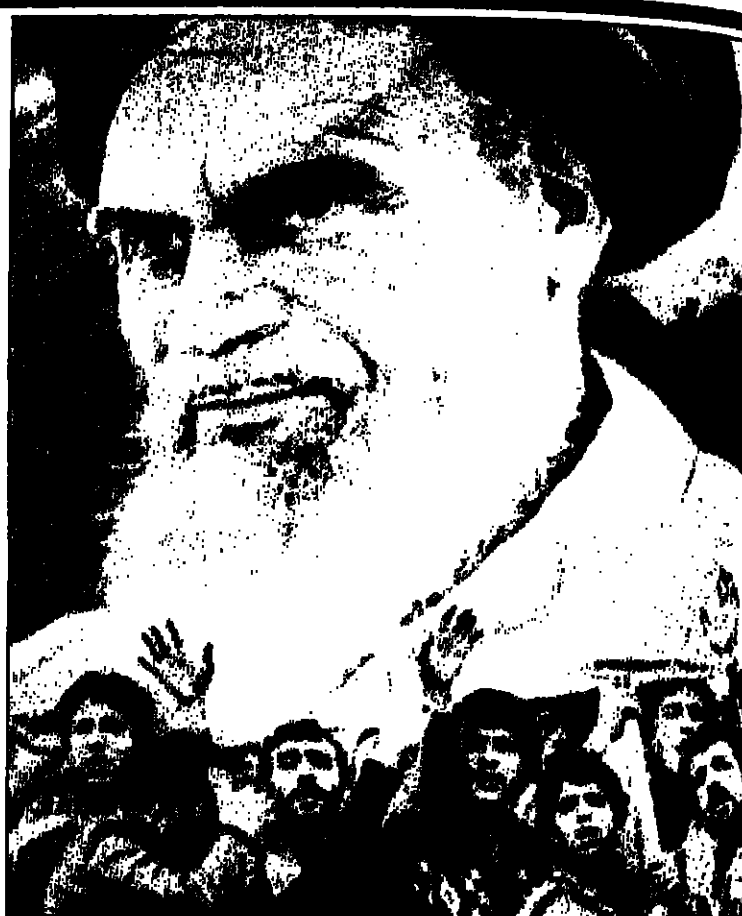
may have had". But he does not altogether explain why this was so. Why did this loss of confidence occur? It was not just an intellectual disenchantment with the popular press, felt by Stephen Spender and his like; for, after all, crowds of people used to flock to hear the great political orators in the early twentieth century; and the decline of this phenomenon might offer a clue to the decline of the political press. Two explanations are worth considering. It might have been a change in the attitude of the British public towards the profession of politics itself; an abandonment of the belief, which reached its apogee in the 1870s and 1880s, that politics really mattered, that it offered the means to achieving the good life; or, at least, a disenchantment with the idea that party and parliamentary politics were the means by which the citizen influenced or shaped his political destinies, and a turning towards the pressure group as the individual's political reference point. More simply, it might have been because politics was, after 1880, ousted by sport as a means of mass public entertainment; with sport followed in the twentieth century by the cinema; then television, and nowadays the video as easier and more congenial ways of diverting one's attention from humdrum everyday life.

Despite the fall of the political press, politicians have not felt themselves liberated from their, admittedly mainly theoretical, fourth-estate critics. On the contrary, they have appointed several Royal Commissions since the war in order to keep alive a diverse, politically aware, and vigorous newspaper press. But, as Professor Koss points out, the belief inherited from the last century that an economically free press was a politically free press - albeit a custom more honoured in the breach than the observance - paralyses any real intervention by government in the structure of the press. It is the left that is prepared to take matters further; and it shows more idealism than economic or political realism in its search for new paper voices. He ends with a quotation from Anthony Crossland who, while conceding that the media "have their dangers", argued that "all too often we make them a scapegoat for deeper failings".

It is unlikely that Professor Koss's work will be supplanted for a long time to come, and if he has not given any startlingly new insights into the nature of the British press (there probably are none to give, anyway), he has written books that correct important misconceptions, fill out details, offer a distinctive theme, and make indispensable reading for any serious student of the subject. He has, in short, put recent British press history on the map.

D. G. Boyce

Dr Boyce is senior lecturer in government at University College, Swansea.



A demonstration against the Shah in Tehran, December 1978. The picture is taken from Andrew Wheatcroft's *The World Atlas of Revolutions* (Hamish Hamilton, £12.95 and £7.95).

Force for subversion

Britain and European Resistance 1940-1945: a survey of the Special Operations Executive, with documents
by David Stafford
Macmillan, £20.00 and £8.95
ISBN 0 333 23770 6 and 34985 7

The Special Operations Executive (SOE) was created in July 1940 with the Minister of Economic Warfare, Hugh Dalton, as its head to conduct subversive, but distinct from intelligence, work in Nazi-occupied Europe. Dalton, who regarded SOE as an instrument of social revolution ("now set Europe ablaze", Churchill told him when he got the job), was succeeded by the utterly different Lord Selborne, conservative and monarchist, in a government reshuffle in February 1942.

In a chequered career, threatened with abolition on more than one occasion, SOE collaborated with and provided resistance forces on the continent, its peak of activity coming in 1944 with the landing of Anglo-American armies in France. But the American armies in France, in September 1944 it employed almost 10,000 British service personnel. In August 1945 the Defence Committee decided that SOE should be combined with the Secret Intelligence Service (SIS) and in the following June it officially ceased to exist.

David Stafford, formerly a member of the British diplomatic service and now professor of history in British Columbia, tells the story of SOE in this readable and sympathetic book. It is rounded off with 40-odd pages of documents, which mostly originated with the Chiefs of Staff. The Lawrence of Arabia-type exploits of SOE warfare are not retold; what we have is an almost painful tale of the struggle of this hybrid organization to survive and win resources for itself amid the continuous hostility of the Foreign Office and service chiefs (who were apt to refer to it as "a bunch of crackpots" or "lunatics"). The difficulty about Professor Stafford's undertaking is the carefully preserved secrecy which still surrounds the affair; anything like complete archives are not available. Fortunately, the weeding out of documentary material in the Public Record Office was not efficiently done and Stafford manages to lay his hands on the substantial thread of events.

As he points out, the creation of SOE reflected the curiously optimistic belief at the beginning of the war that Germany would be brought to its knees by economic pressure and saturation bombing; instead, the Germans and their captives to the rebels against their Nazi overlords, Churchill's romanticism, Stafford writes,

often led him to think that revolution against Nazism all over Europe meant that it only needed a psychological push to collapse.

In this mood SOE was founded, but almost from the start ran into trouble. The Foreign Office, with no stomach for "setting Europe ablaze", feared the damaging effects of subversive warfare on neutral states like Spain and Sweden that Britain wanted to cultivate. Exiled governments in London had little liking for revolutionary ideas being stirred among their peoples; they also dreaded uprisings in Europe, unaccompanied by Allied landings and paid for by Finnish German reprisals. Bomber Command begrudged aircraft being spared for SOE missions. The Chiefs of Staff needed convincing of the value of guerrilla warfare. Above all, networks set up in Europe by SOE were highly vulnerable to Nazi, and later communist, penetration. In December 1943, the Commander-in-Chief Bomber Command suspended all flights connected with SOE operations in Europe on the ground that the agency's network in Holland had been penetrated and controlled by the Germans since 1942. It led to the SOE's worst crisis, from which, as Professor Stafford puts it, "it barely survived".

SOE's job was to cooperate with the guerrillas who fought Hitler. But the guerrillas, especially in the Balkans, were split into rival factions. In Yugoslavia, the painful choice had to be made between Mihailovic's Chetniks and Tito's communist Partisans. In November 1943, Britain, on military grounds, opted for the latter. But in Greece, where the left-wing EAM-ELAS group confronted the Government and the monarchy, Churchill, the authorities in Athens, in Italy, Churchill's fear of a communist takeover conflicted with SOE's subversive strategy, which might involve working with the communists. After Russia came into the war in June 1941, Stalin began directing resistance forces after his own manner and in his own sphere of influence. Britain, anxious to stay on good terms with him, withdrew SOE from interference in Poland and Czechoslovakia.

It is a complex picture of fine balances having to be struck between conflicting interests and pressures. But what exactly did subversion contribute to Hitler's defeat? Professor, though he is reluctant to give an opinion, thinks that the British officers who said that, after D-Day, it was a "bonus" though no more than that. Certainly, this book gives no support to those who think that the communists Europe which the Soviet Union now dominates can be tumbled by subversion alone.

F. S. Northedge

F. S. Northedge is professor of international relations at the London School of Economics.

BOOKS

New routes to salvation

The Elementary Forms of the New Religious Life
by Roy Wallis
Routledge & Kegan Paul, £12.50
ISBN 0 7100 9890 1

One of Roy Wallis's main interests during the past 12 years has been in the construction of a typology of post-World War II new religious movements in the West, a typology linked to an analysis of their sources of support and patterns of development. He was well aware that in taking on such a task he was tempting the gods! During the period covered by Wallis, and particularly since 1960, there has emerged in the West what amounts to a thriving industry in new religious movements, some of them indigenous and many others arriving from Africa, Asia and

elsewhere. There are an estimated 600 in the EEC countries at present and the figure is even higher for North America.

Despite the diversity and inspired insights, Wallis breaks down the vast plethora of new religions into three basic types: world-rejecting, world-affirming, and world-accommodating. The world-rejecting type of new religion which includes the Children of God, the Unification Church, Hare Krishna and most of the Hindu-oriented movements has, Wallis suggests, a more developed, refined, theistic centred theology, and a more hierarchical, church-like structure, than the world-affirming type such as Scientology, Silva Mind Control, est, Transcendental Meditation and Soka Gakkai (Nichiren Shu).

Moreover, the former roundly condemns the prevailing social order for its preoccupation with materialism, and awaits or works towards a profound transformation of society, "a reorientation of secular life to God". The world-affirming type, on the other hand, looks upon the wider society in a much more positive way, endorsing many of its values, and seeing its own role primarily in terms of the provision of ideas, techniques and skills which will enable people to relate to the world more meaningfully, improve it and gain the maximum benefit from

what it has to offer.

In both the world-rejecting and world-affirming new religions, little distinction is made between spiritual and worldly concerns, while world-accommodating movements, examples of which are the Charismatic Renewal Movement, Neo-Pentecostalism, Subud, and the Aetherius Society, make no direct link between the religious and social spheres and thus any social or political commitment for society will be largely unintended. These movements are less about society and more concerned with the renewal of prevailing religious institutions or their loss of vitality. They are, one might suggest, world-indifferent movements.

As for their sources of support, the world-rejecting movements have in the main attracted those seeking salvation from the impersonality and loneliness of the world, while the world-affirming type appeal to those affected by the unequal distribution of resources - power, status, self-confidence and so on - in society. Comparatively little is said about this aspect of the world-accommodating type, but it would appear that their main source of support is among those who "felt something to be lacking in their spiritual lives, particularly an active experience of God's power working within them and within the Church". It is all very neat, but perhaps a little

circular.

At a more general level, Wallis explains the rise of new religions by reference to the twin processes of rationalization and secularization endorsing and developing here much of what Bryan Wilson - to whom the book is dedicated - has to say on the subject. New religions are both a response to and an attempt to grapple with these processes, but since they are dependent on a fluctuating market and on such a precarious commodity as charisma, they are unlikely, Wallis maintains, to restore enchantment and mystery to the modern, rational, secular world. It is, however, open to question whether modern society is as systematically and consistently secularized as Wallis makes out. Moreover, increased leisure, greater emancipation for many from economic pressure, perhaps higher levels of unemployment, and technological advance, might well provide a basis for a broadening and deepening of interest in the transcendent or supernatural, however defined.

The Weberian-inspired typology presented here, with modifications and refinements, began life in learned journals in the late 1970s, and has undoubtedly during its existence both assisted research and contributed to our understanding of the phenomenon of post-World War II new religions. However, it would seem to be in need

of further clarification and refinement, otherwise the strains imposed upon it by empirical data, among other things, could seriously limit its usefulness which, as Wallis points out, is the ultimate test of a typology.

First of all, it is very debatable whether Hindu and/or Hindu-related movements as a group can be classified either on grounds of content or in terms of response to the world, as world-rejecting. Further, there remains some doubt about the appropriateness and usefulness of the world-accommodating category. Does it actually point up and explain salient differences between a movement so depicted and, for example, the world-rejecting type? An emphasis on the spiritual side of life alone, while it might indicate indifference to the world, might also be indicative of a rejection of the wider social order as it stands. Finally, the tendency of many new religions to change direction at the stroke of a pen or on instant command from on high would seem to limit severely the lifespan of a typology based on response to the world.

Peter Clarke

Peter Clarke is research fellow in the Centre for New Religious Movements and lecturer in the sociology of religion at King's College, London.

Survival on Nazi sufferance

The Nazi State and the New Religions: five case studies in non-conformity
by Christine Elizabeth King
The Edwin Mellen Press, \$29.95 (subscription) and \$39.95 (non-subscription)
ISBN 0 889 46 865 6

The fate of five sects - Christian Scientists, Mormons, Seventh Day Adventists, the New Apostolic Church and Jehovah's Witnesses - during the Third Reich is the subject of this book. The interest lies in the different strategies for survival of the sects and the different policies of the Nazis.

None of the sects was large: the New Apostolic Church had some 250,000 members but the others only tens of thousands. All were loyal Germans who had no intention of opposing the Nazis in 1933. The only serious issue over which conflict could have been foreseen was the Jehovah's Witnesses' refusal to do military service, a stand which was wholly repugnant to Nazi ideology. Otherwise, the sects' beliefs presented no challenge and indeed in several cases they had been sympathetic to Nazism before 1933. This may reflect recruitment from the same social classes as the Nazi party, although evidence is lacking. Another

possible explanation is the authoritarian principle and total commitment common to at least some of the sects and the Nazi party.

Despite their numerical insignificance and their generally supportive stance towards the Third Reich, the sects were not left in peace by the Nazis, although neither were they consistently persecuted. All sects were treated as suspect but the degree of harassment depended on how successfully the sect was able to defend itself. They had first to prove their "political neutrality" by establishing their hostility to Communists, Jews and Freemasons. In several cases this involved compromises of practice or belief to avoid identification with Judaism, such as over the Adventists' Saturday Sabbath or the question of whether Jesus had been a Jew. A second line of defence was for the sects to demonstrate their usefulness to the Third Reich by having powerful friends.

Reinhard Heydrich, chief of the security police, noted in 1941 of the Christian Scientists that they had previously been protected by the desire not to harm relations with England, where Lord Halifax, Lord Lothian and the Astors were known to be Christian Scientists. The Mormons also escaped, partly through the belief that they could influence American opinion and by their contributions to state welfare schemes. However, they also probably benefited from Hitler's good opinion and this, together with their willingness to compromise (including in one church a ban on Jewish membership) saved them serious difficulty even after 1941.

Only the Jehovah's Witnesses attracted unremitting persecution and were thereby driven to resistance. Finding an explanation of their suffering in their teaching, they were able to bear even the worst concentration camps with a courage which made converts of some of their guards and excited the admiration of Heinrich Himmler. The attempt to crush this small sect is a good example of the classic theory of totalitarianism (the unwillingness to tolerate any rival focus of loyalty, however insignificant) while the failure of the attempt shows the limits in practice on the Nazis' success in creating a totalitarian state. The more pragmatic treatment of the other sects and of the major Christian denominations equally shows limits on Hitler's power up to 1945.

Christine King has provided an informative and discriminating guide through this complicated story. She is judicious in her conclusions and cautious about generalizing, though she points to parallels in the experience of the Jehovah's Witnesses in the Soviet Union and parts of Africa.

Unfortunately, there is no adequate discussion of source material and so it is difficult to know how much of her argument is based on surmise and how much on evidence.

T. A. Roberts

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Jonathan Wright

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Muddling on

The Troubled Alliance: Atlantic relations in the 1980s
edited by Lawrence Freedman
Heinemann Educational, £16.50 and £6.50
ISBN 0 435 83326 X and 83327 8

Nato has just celebrated its thirty-fifth birthday. It was on April 4, 1949 that representatives of 12 nations gathered in Washington to sign the North Atlantic Treaty, which has constituted the foundation of the western alliance ever since. Yet a couple of years ago many doubted whether the alliance would survive into middle-age. Afghanistan, Poland, the Siberian pipeline, Central America, the Middle East and the modernization of Nato's theatre nuclear forces - all these were generating bitter transatlantic debate. Meanwhile Americans complained about EEC-subsidized trade competition while Europeans protested that US monetary and fiscal policies were retarding their recovery from recession. "Crisis" always makes a good headline. Scholars, journalists and public figures penned Nato's obituary and learned conferences were assembled to dissect the corpse. One such gathering convened in London in June 1983, and this collection of essays represents the fruits of its deliberations. The papers span the whole range of

alliance problems, from Andrew Britton's discussion of international monetary relations to Peter Foot's appraisal of Nato responses to third world instability. Such breadth is entirely correct because it is the conjunction of security and economic issues which distinguishes this from most earlier transatlantic disputes. Even more welcome is the participants' eschewal of "crisis" rhetoric. The terms of the debate have shifted in the last year, most notably, as the editor observes, because of the electoral victories of conservative governments in Britain and West Germany, both dedicated to implementing Nato policy on nuclear weapons. And most of the contributors discern cogent reasons for believing that Nato will survive, or at least muddle on.

Analyzing opinion data, Catherine Kelleher emphasizes the depth and persistence of American support for the alliance, while David Watt points to the remarkable impact of the USA on all aspects of European life since 1945 and the limits even in France of anti-American nationalism. Few of the writers champion the status quo, as definitively as Josef Joffe, who rejects alternative, conventional strategies in favour of the orthodox of flexible response based on an ultimate US nuclear guarantee. But Joffe reminds us that Nato was designed not just to defend western Europe, from the Soviet Union but also to protect western Europeans from themselves, and his next security relationship must take account of the still latent "German problem".

Yet, although the contributors be-

lieve Nato will continue, they raise fundamental questions about its competence to deal with common problems. Kelleher notes emerging US criticism of Atlantic ideas and Watt indicates the diminution of support for the US alliance even in strongly pro-American West Germany. A central concern is the growth of European economic power. Stephen Woolcock examines the trade rivalry between the USA and the EEC, which reveals underlying differences in economic philosophy. By contrast, monetary problems are less divisive than in the early 1970s, but Britton and John Pinder both emphasize that the growing interdependence of international trade for goods and capital has not been completely bridged by the creation of appropriate managing institutions, especially in monetary affairs.

The fundamental question remains whether the arrangements made in the 1940s, at a time of extreme US dominance and European weakness, are still suitable for a very different world. Do we need to return, as David Calleo suggests, to George Kennan's dissenting vision of a "two pillar" Atlantic alliance, involving true Euro-American partnership and mutual responsibility, instead of one dependent on US hegemony? Most of the contributors seem to favour such a development, but their stimulating essays also indicate how difficult it will be to achieve.

David Reynolds

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BOOKS

A dig at Frege

Frege: logical excavations
by G. P. Baker and P. M. S. Hacker
Blackwell, £29.50
ISBN 0 631 13169 8

Today Frege is widely acknowledged to be a philosopher of genius whose investigations into problems of direct contemporary relevance – problems to do, for example, with meaning, truth, objectivity, thought, sense, reference, objects, numbers, and many others – are profound, original and influential. Frege stands alongside, say, Russell, Wittgenstein and Husserl as one of the most eminent of twentieth-century thinkers.

His contributions can be divided roughly into two categories. On the one hand, Frege was a mathematical logician whose technical work in logic marked the greatest single advance in the subject since Aristotle's time. On the other hand, his writings also contain considerations of a less technical and more generally philosophical kind. Here Frege saw three fundamental relations as standing in urgent need of elucidation: first, the relation between a thought or judgment and the language which can be used to express it; second, the relation between the world and the language that can be used to describe it; and third, the relation between logic and any meaningful thought or language. His technical work is largely unproblematic in that, where acceptable, it has been assimilated, and where unacceptable it has been simply ignored. There is, however, a great deal of current debate about his philosophical views, about how in general thought, reality, language and logic are related one to another.

Baker and Hacker deal exclusively with these latter aspects of Frege's thought. They have set themselves two goals: to provide an accurate account of what Frege said; and to provide an objective evaluation of the doctrines thus isolated. The emphasis throughout, however, is on evaluation rather than exegesis, and the evaluation they offer is clearly meant to be controversial. For Frege's philosophy has been misunderstood, they claim, precisely in so far as it has been taken to be original, profound, true, relevant, interesting, cogent, intelligible or, in short, of any intrinsic value whatsoever. And the only extrinsic value they are prepared to concede it is that it may be useful, so to speak, as a vaccine: "The study of past philosophical thought [like that of Frege's] exposes us to weakened strains of philosophical diseases which may give us partial immunity to more virulent contemporary strains." It seems, then, that "Frege" is the name of an intellectual disease – one which this book is meant to stamp out.

But if the authors sometimes see themselves as doctors curing sicknesses in our thoughts, they also, confusingly, see themselves as intellectual archaeologists. Their "logical excavations" will, it is claimed, unearth the real, the historical Frege – as distinct, that is, from the many false, historically inaccurate representations of him currently in circulation. Baker and Hacker isolate two forms of pernicious anachronism in writings about Frege: one is the widespread assumption that Frege's purposes, concepts and presuppositions were the same as ours – or at least so closely related to ours as to require no historical adjustment or reinterpretation. But as soon as one makes the appropriate adjustment and places Frege in the right historical setting, they claim, the temptation to see him as a major twentieth-century philosopher vanishes. The real Frege can then appear in his true colour – as just one more traditional nineteenth-century logician whose concepts and concerns are thus by no means the same as, or even relevant to, our own.

The other anachronism the authors wish to counter is the general tendency among commentators to read Frege's works in reverse order, interpreting the early works in the light of his mature works, especially *Grundgesetze der Sprache*. Frege, they argue, is a quiet, different view emerges. Instead, we read the works with an historically sensitive eye, in their chronological order: for then the mature writings can be seen as natural developments of, and responses to, the earlier ones. This seems to me quite right – though Baker and Hacker are wrong to suggest that they are the first to adopt this approach.

As a consequence, great emphasis is placed on the early works; indeed, over half the book is devoted to what the authors call "Frege's youthful insights". Given their treatment, however, "youthful incoherences" would have been a more apt description. In effect, they proceed by trying to show that the early doctrines are fundamentally incoherent, and that this incoherence is subsequently inherited by the mature doctrines which grow naturally out of them. For their overall evaluation of Frege to be plausible, then, it is essential that Baker and Hacker succeed in giving not only an acceptable account of Frege's early doctrines, but also a persuasive demonstration that they are philosophically worthless. They do neither.

There are many mistakes, and not a few howlers, in their account of Frege's early thought. Most embarrassingly, however, it turns out that they are guilty of the very anachronism their much vaunted approach was intended to outlaw. Many of the conclusions reached in part one are vitiated by their uncritical assumption that Frege's mature notions of object and function can be read back into the early works. For example, we are told that at the time of *Begriffsschrift* "Frege stressed that an abstract object, comparable to a number", and hence that at this time he assimilated sentences to proper names. But it is doubtful whether Frege even possessed the required concept of an "abstract object" at this time. It is doubtful that he thought of numbers as such abstract objects at this time. And he certainly never "stressed" the alleged claim; indeed, he did not make this claim even once, either in his published or unpublished writings, either early or late.

What is most objectionable, however, is not so much the poor quality of the "excavation work" performed by Baker and Hacker, as the ways in which they then proceed to evaluate its results. Tendentiously dismissive is followed by dogmatic dismissal. Abuse, parody, rhetorical questions, appeal to authority (Wittgenstein, in other words) and unmitigated dogmatism couched in emotive and pejorative terms – such devices as these too often

appear in lieu of any attempt to develop and substantiate cogent objections. Time and again we are told that certain apparently intelligible claims are just "gibberish" or "nonsense" without being given the slightest justification or explanation for this. Time and again the authors write as though extending a metaphor were philosophically more valuable than developing an argument.

Baker and Hacker see their task as archaeological, yet their work is openly iconoclastic. Ultimately the book fails to persuade, because these two aims are irreconcilable. And so when they conclude that in the great arch of Frege's thought "the foundations are rotten, the principles unsound, . . . the supporting members cracked and flawed" and "the key to the missing" the reader is left with the strong impression that the excavation has not so much discovered this damage as created it. For the fact is that other "archaeologists", using more sensitive techniques, continue to unearth exciting and valuable finds at this site.

David Bell

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Einstein at close quarters

Relativity and Its Roots
by Banesh Hoffmann
Scientific American Books
Freeman, £15.95 and £8.95
ISBN 0 7167 1478 7 and 15104

There have been many books expounding the theories of special and general relativity. Although in some ways this is just one more of them, it differs in two respects. Banesh Hoffmann collaborated with Einstein and infold in the great project which derived the equations of motion in the theory of general relativity from Einstein's field equations. So who better to expound the theory? Second, as anyone acquainted with Hoffmann can testify, he has never thought ill of anyone, so his judgment of people who contributed to his story is uniformly flattering. Although there is some disavowal in terms of objectivity, it does make for very pleasant reading.

Hoffmann begins the story by considering those people whose work led up to Galileo and Newton, concentrating particularly on Copernicus. The important part of this great sweep of history for him is the fundamental idea that the Earth might not be the centre of the universe. His description of Galileo is typical. On the one hand, he is extremely informative – telling us in two sentences that he was born in Pisa in 1564, on the very day on which Michelangelo died and in the year of Shakespeare's birth, that he was Kepler's senior by seven years but outlived him by more than a decade. However, although those two sentences place Galileo most precisely, it is fair to say that the subsequent remarks give a pretty flattering impression of a man who had no less of human failings than most.

Once the Earth is dethroned from its central position, the way is open for the foundation of classical mechanics. Hoffmann therefore goes straight on to consider Newton, although here again he is generous by a fault and in his historical details somewhat cavalier. Rather curiously, he tells us about the visit of Halley to Cambridge in 1684 in connection with "a scientific argument that had taken place in a London Inn" – thus losing the opportunity to mention that one of the protagonists in the argument was Wren.

Although the discussion of Newtonian mechanics in non-technical terms is very satisfactory, in so far as it deals with the parts of Newton's *Principia* which everybody knows about (that is, standard about the speculative, later parts. What is mentioned, however, and this is very important, is the fact that Newton, having written the book to show the absolute character of space and time ("For it was to this end that I composed it"), was easily able to deduce that their character was essentially relative. This is the first real intimation of the importance of this

relative character. Although Galileo had mentioned the relativity of space in passing, Newton was more specific. Hoffmann's next chapter then deals with what he calls the "optical theory of relativity". By this he means that the optical experiments were soon sufficiently accurate to show conflict with the Newtonian ideas of relativity.

Here, however, Hoffmann loses another opportunity, as there is no mention of Euler, who proposed to differentiate between particle and wave theories of light by means of an experiment involving a moving observer. Nevertheless, the chapter is particularly good on Maxwell; in fact, it is he who originally had the idea of what was later to become the Michelson-Morley experiment, designed to determine the relative velocity of the Earth and the "aether", and (the less-known fact) Michelson came to do this experiment by reading a reprint of Maxwell's letter to Todd in *Nature*.

The core of the book, however, is the next chapter, which expounds Einstein's theory of special relativity, as with other popular expositions, in terms of the Michelson-Morley experiment, and of experiments with clocks and signals in motion. What is different and valuable about Hoffmann's exposition, however, is the extent to which the author considers the development of Einstein's ideas at different parts of the theory, a consideration which he is well able to judge because of his close working relationship with Einstein in the later years at the Institute for Advanced Study in Princeton. A particularly useful place for work at the end of this chapter shows in a very elementary way the Penrose-Terrell results about distortions in the shape of moving objects.

A final chapter then deals with the theory of general relativity in terms of the principle of equivalence. Although this chapter is good on the development of Einstein's ideas between 1905 and 1915, it might have been preferable to mention briefly Hilbert's name in connection with the field equations, but otherwise the exposition is very clear and reliable.

The only way in which this splendid book might have been improved would be the expansion of the rather bold historical remarks – some of which are inaccurate. For example, in the chapter on the general theory, Hoffmann states that when Eddington came upon the details of Einstein's theory during the Great War, he was so captivated by its beauty that he began making plans for eclipse expeditions to test it. Although there is no doubt that Eddington was captivated by the beauty of the theory, in fact he saw no reason for the eclipse expedition. As he said, he knew the theory must be right because of the beauty. The reason why he headed the eclipse expedition was because the scientific establishment wanted him to be involved in the safer occupation of planning it rather than fighting on the Western Front.

Similarly, in the discussion of Newton, Hoffmann states that once the *Principia* was completed Newton was exhausted and ill, the implication being that he could do nothing until 1686 when he was appointed Master of the Mint and went to live in London. Although there is a certain amount of truth in this statement, it telescopes a whole piece of Newton's life most extremely and implies that during one of his most active periods he was producing nothing.

Incidentally, Hoffmann expresses surprise, as other authors have, that Barrow gave up the chair of mathematics in Cambridge so that Newton could be appointed in his place, a remarkable gesture on Barrow's part. It is worth remarking, however, that Barrow did this not to go out into the wilderness but to accept the Gresham Chair of Geometry in London, and only Cambridge people find it difficult to understand why one would wish to leave a quiet corner of the fens for the metropolis.

The book bears traces of *Scientific American* style, and one might conjecture from this that a good deal of sub-editing had been carried out. It is pleasant to note, however, that the author's characteristic style still shows through clearly. The advantage, however, is seen in a number of insets or boxes, where a slightly more technical expansion of details of the theory is given.

C. W. Kilmister

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BOOKS

Green physics

Biophysical Plant Physiology
and Ecology
by Park S. Nobel
Freeman, £30.95
ISBN 0 7167 1447 7

It is often said that the ultimate objective of the science of biology is to account for all the properties, characteristics and activities of living organisms in terms of the laws of physics and chemistry. Although there are those who do not subscribe to this view, Park Nobel would certainly not be numbered among that mystical minority. The approach taken in this concentrated text is that of the physicist who can see no reason to consider the boundary between the animate and the inanimate world as any form of barrier to incisive quantitative analysis.

Uncompromisingly quantitative in approach, Dr Nobel deals intensively with those aspects of plant physiology which are amenable to such analysis, but leaves other topics strictly alone. The flavour of the book therefore is dry, with the excitement being derived from the intellectual achievement of the author, rather than from the remarkable diversity of behaviour and adaptation exhibited by the green

plant. There is little here of the sense of wonder that one often sees in biology textbooks – after all, the plant is only a rather complex physico-chemical system, of which certain aspects are already exploitable by the physicist.

At a deeper level, the book can be immensely rewarding to those who are prepared to put in the necessary work. The style is generally crisp and clear, although the preponderance of phrases such as "As our next step, let us consider . . ." renders the treatment rather irritating at times. It must be said, however, that the author has an outstanding ability to take the mathematically semi-literate through what are, in fact, complex and difficult issues. This is achieved by the use of appropriate numerical examples in the text, in which the vital steps are not missed out – as unfortunately they often are in books written by physicists for biologists – and is reinforced by collections of problems at the end of each chapter to be worked out by the student. Also of considerable use to the mathematical tyro are the several appendices which provide help in calculus and irreversible thermodynamics, as well as lists of symbols, units and various constants.

As the book is largely concerned with the direct effects of the immediate environment on plant physiological processes, it concentrates on what might be described as "inputs, outputs and exchanges". Individual chapters cover cells and diffusion, water, solutes, light, photochemistry of photosynthesis, bioenergetics, temperature, energy budgets, leaves and fluxes, and plants and fluxes. As one who has been charged with teaching some of these topics to undergraduates, I have in the

past been grateful for the help that I have derived from the book's predecessor *Introduction to Biophysical Plant Physiology*.

Although this new book differs, except that it seems significantly larger, closer examination reveals the amount of painstaking effort the author has put in. His book is as up to date as a textbook in such a rapidly advancing field can be, although this is rather difficult to judge as primary references are rarely provided. Indeed, this is my major criticism: much of the book's great potential as a teaching aid is lost because of inadequate guidance to the literature, even though lists of further reading, which will be of great value to the student, are included. My other disappointment is that the author has not yet attempted to apply his biophysical approach to a vast area of plant physiology not covered in this book – namely, plant development. It may be, however, that Dr Nobel feels that the physicochemical map of plant physiology is as yet insufficiently extensive to allow imprudent wandering in the minefield of plant development.

This is not the type of book one might expect to find on every plant physiologist's shelf, and at its price it is unlikely to find favour with students. However, those who do take the trouble to work their way through it – or even just through those parts of particular personal interest – will be substantially enriched by the effort.

Harry Smith

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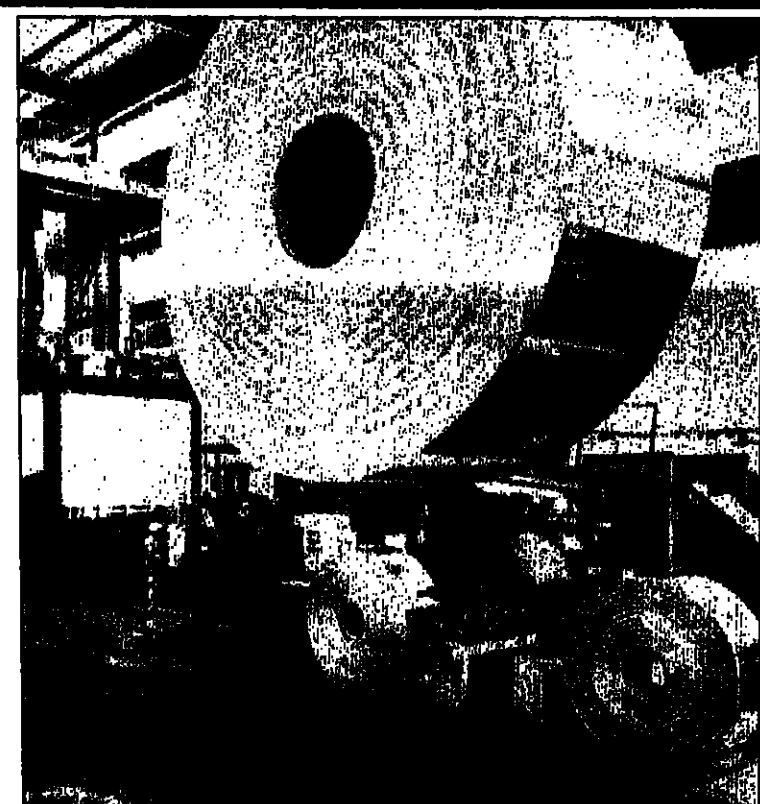
Speedier trunk dialling

Optical Waveguide Theory
by Allan V. Snyder and John D. Love
Chapman & Hall, £29.95 and £15.95
ISBN 0 412 09950 0 and 242 50 8

The network of modern high-capacity trunk telecommunications is being replaced steadily by cables containing fibre glass fibres, each fibre about a tenth of a millimetre in diameter and capable of carrying thousands of simultaneous telephone conversations or a few high-quality television channels. The signals are carried by light (or infra-red radiation) transmitted through tens of kilometres of fibre without need for amplification, and the loss of light in the fibres is comparable to that experienced by a beam of light passing through the clear atmosphere. Tiny semiconductor lasers, less than a millimetre wide and long, provide the light sources.

The cylindrical glass fibres within the protective cables consist of two regions, core and cladding, made of differing glass composition, and the essential feature needed to allow very low-loss light transmission (apart from ultra-high purity of the glass) is that the refractive index of the core glass is higher than that of the cladding, usually by less than 1 per cent. Thus a very simple terms a ray of light directed along the fibre within the core region in an approximately axial direction will encounter the core-cladding boundary at a glancing angle, and will be totally reflected back into the core to continue its passage along the fibre.

The development of this simple ray theory of light transmission in optical waveguides is the first part of *Optical Waveguide Theory*. If the core of the fibre is of a much greater diameter than the wavelength of the transmitted light (which is itself about a hundredth of the overall diameter of the glass fibre), so that the core occupies a half or more of the total fibre cross-section, the ray theory can be applied to a large range of transmission problems associated with optical guides. Snyder and Love have been in the forefront of promoting this approach to the analysis of glass fibre waveguides for over a decade, and the first ten chapters of their book provide a comprehensive theoretical treatment of large-core fibres using ray theory. The wave nature of light must eventually be considered when the core-cladding boundary is examined in detail, but otherwise ray theory is shown to be sufficient, and has led to the detailed



Entry end of an electrolytic tin plate line. Electrolytic tin plate is produced by the continuous electrodeposition of tin directly on to steel strip moving at high speed through a processing line. From B. T. K. Barry and C. J. Thwaites's *Tin and Its Alloys and Compounds*, published by Ellis Horwood (Wiley) at £25.00.

design of the cross-sectional refractive index profile of large-core fibres to allow digital transmission along such fibres at 140 megabits per second over several kilometres. This is only the first of a new generation of glass fibres that has been used by British Telecom in their trunk optical links.

The second part of the book is devoted to the description of optical waveguides in terms of wave modes, using an electromagnetic wave analysis to describe the behaviour of light within a fibre. Such an approach is necessary for dealing with optical fibres with small cores, only a few wavelengths in diameter; and as with metal-walled microwave guides, the light is found to travel in discrete modes. Below a certain core diameter only one mode, with a particular energy transmission velocity, will be transmitted along the fibre with very low loss. A "single-mode" fibre with consequently much-increased bandwidth or information-carrying capacity. Single-mode fibres are now being installed in long-distance high-capacity links. However, although waveguide mode solutions are presented for many types of fibre in various conditions, I sometimes had the impression that the

search for completeness has gone too far. Guided optical communications is a rapidly-developing subject, and the authors have wisely refrained from making much reference to applications of optical waveguides. This has resulted in a book which should stand for a long time as a reference source of the mathematical background to optical guiding effects. The theory is presented with logic and clarity, each topic being accorded a separate chapter (there are 37), with copious use of paragraph headings. However, as there is no indication of the relative importance of the various theoretical results, in a postgraduate course for metal-walled microwave guides, the relevance of the theory to the various problems of optical guiding systems.

P. J. R. Laybourn

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Humbler particles

The Discovery of Subatomic Particles
by Steven Weinberg
Scientific American Library
Freeman, £10.95
ISBN 0 7167 1488 4

Nobel laureate Steven Weinberg recounts for a general readership the story, not of the new particles with whose recent discovery his name is intimately linked, but of the humbler electron, proton and neutron.

The book derives from a Harvard lecture course for non-scientists. For each experimental observation, Weinberg provides in a series of flashbacks a guide to the principles of classical physics which underlie the interpretation. Thus, after explaining J. J. Thomson's measurement of the deflection of cathode rays passing between electrically charged plates, Weinberg takes the reader through a brief history of electric forces from Coulomb to Faraday, enabling him to calculate the deflection from first principles. This is a remarkably painless and successful way to teach the basic ideas of physics.

Such a project needs a theme. Here it is ready made, in the shape of Cambridge's Cavendish Laboratory, the scene of so much of the experimental work to elucidate the structure of the atom. There is Thomson, the clumsy experimenter extrapolating daringly to the existence of the electron; the gifted H. G. J. Moseley, dying tragically in Gallipoli; F. W. Ashton, whose mass spectrograph might have inspired Heath Robinson; above all, Ernest Rutherford, leader and inspirer of perhaps the most productive group of physicists ever assembled in one place, not excepting Los Alamos in 1943. The frontispiece shows the Cavendish staff and students ten years earlier. There are seven Nobel prizewinners; an eighth, John Cockcroft, is missing from the photograph. The theorist Paul Dirac, that year's laureate, was not a member of the Cavendish, being professor of mathematics.

Weinberg, too, is a theorist. And the discovery of the atom and its consti-

tuents is remarkable as an episode where theoretical beliefs, notably the positivist views of Ernst Mach, were constantly challenged by experimentalists who interpreted phenomena in terms of realistic mechanistic models, despite the latter's unsound status. Their hunches mostly came off. The mass-to-charge ratio of cathode rays seemed to be constant (though Thomson's evidence looks remarkably fragile); so the existence of electrons was postulated to explain this. Scattering experiments showed the nucleus to be tiny, so the physicists would have to accept that this was so, putting aside the worry about what holds the surrounding electrons in stable orbits. The absence of a satisfactory underlying theory, however, did not deter the men and women of the Cavendish from developing good working models of how the laws of physics might govern the events observed.

Weinberg describes clearly and convincingly just how this was done. He discusses the technical problems, the personalities of the scientists, and their mistakes (not many). Above all he makes clear the hierarchical structure of physics. These men, like Newton, stood on the shoulders of giants, and Weinberg lovingly recreates their family tree, with its engaging eccentricities, its quiet geniuses, and even its black sheep.

There is much of interest here for all readers. I did not know Dalton's measurements – from which he surmised the atomic nature of the elements – were so poor. Nor had I realized that Thomson's calorimetric measurement of the electron's mass-to-charge ratio was much more accurate than the deflection method of the textbooks.

The book, with its splendid photographs, is not as aesthetically edited as the articles in *Scientific American*, so the text is authentic Weinberg – very much reminiscent of his earlier brilliant exposition *The First Three Minutes: a modern view of the origin of the universe* (revised edition, Fontana, 1983).

John Edgington

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Recursive functions

Computability
by George J. Tourlakis
Reston: Prentice-Hall, £28.45
ISBN 0 8359 0876 3

Some people used to believe that given enough time, money and ingenuity one could build a computer to do anything. Yet the earliest mathematical results concerning what computers could do showed precisely the opposite: that there were tasks which computers could not perform – and they proved this with complete mathematical rigour.

Computability theory is the theory of what computers can and cannot do. It may seem surprising, but it is possible to prove by mathematical means that among the things they might reasonably expect computers to be able to do there are many which they cannot. As an illustration, consider the theory of whole numbers (0, 1, 2, 3, 4, and so on) with the familiar operations of addition and multiplication. As this is a very "simple" branch of mathematics, you might expect to be able to design a machine which could decide whether any given statement of this theory was true or false. But in fact even this is known to be impossible.

The mathematical study of computability, which began only fifty years ago with such pioneers as Kurt Gödel, S. C. Kleene, Alonzo Church, A. A. Markov, Alan Turing and E. L. Post, has given rise to a rich and complex mathematical theory, and it is this theory that Tourlakis expounds in his well-written and well-presented introduction. However, it is an introduction only in the sense that it starts from scratch and assumes no specific background in programming or computability theory; it is certainly not for the general reader. Indeed, although third-year or graduate mathematics students – and their teachers – will want it on their shelves as a reliable and concise guide, even they will find that it is densely packed.

Alec Fisher

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Universities continued



UNIVERSITY COLLEGE LONDON

"New Blood" and Information Technology LECTURESHIPS

Applications are invited for the following appointments under the UGC's "New Blood" and Information Technology Initiatives. The posts are available from 1 October 1984 and for the "New Blood" posts candidates should normally be aged 35 or under.

"NEW BLOOD" LECTURESHIPS

BIOCHEMISTRY (REF.NB1) - In the field of enzyme biotechnology. Successful candidate should have interests in the development of new enzyme-based industrial processes or industrially-relevant areas of enzyme chemistry. The post will involve contributing to the teaching of both undergraduate and M.Sc. students.

BOTANY & MICROBIOLOGY (REF.NB2) - Plant Biochemistry and Biophysics. Candidates should have interests in either phytochemical techniques to study of photosynthesis. Experience in either phytochemical research, membrane biophysics, or in the application of magnetic resonance techniques (EPR or NMR) to other biological systems would be equally acceptable.

EXPERIMENTAL PATHOLOGY (REF.NB3) - Candidates should be in the position of initiating and carrying out a research programme in the field of transport and chemical processing of viral proteins within cells.

GENETICS (REF.NB4) - Human biological genetics with special reference to the application of recombinant DNA technology to gene mapping and the investigation of human diversity.

GEOLOGY (REF.NB5) - In the field of Palaeontology and Palynology. HISTORY OF ART (REF.NB6) - Candidates should have special research interests in 17th century Dutch Art History.

ITALIAN (REF.NB7) - Candidates should have particular interests in Italian linguistics and philology.

LAW AND ECONOMICS (REF.NB8) - Joint appointment in the Department of Law and Political Economy. Research to be focused on "social" regulation, especially environmental and workplace regulation, consumer protection and products liability. Interest exists in both Departments in question of forms of regulation, accountability of agencies and implementation and enforcement through legal and economic techniques.

PHOTOGRAMMETRY & SURVEYING (REF.NB9) - Optical Sensing. Wide scope exists for research in remote sensing, particularly in relation to mapping, using digital methods and in real time three dimensional measurement in technology and science. Successful candidate should be an engineer, surveyor or other suitably qualified graduate with expertise in areas such as mathematics, computing, physics, surveying.

PHYSICS & ASTRONOMY (REF.NB10) - In the field of Ultraviolet Astronomy. Successful candidate would not only be expected to have an established reputation in UV Astronomy, but also to be conversant with the acquisition and analysis of data in infra-red, Optical and X-ray Astronomy.

INFORMATION TECHNOLOGY

ELECTRONICS (REF. IT/1) - To contribute to CAD of VLSI design, simulation and testing, within the IC Design Centre recently set up in the department on a major SERC research grant. Previous experience in this field less vital than record of success in any related field, coupled to a measure of controlled fanaticism.

PHYSICS & ASTRONOMY (REF. IT/2) - In this field of Image Processing. Successful candidate will take part in a research programme concerned with the development of cellular local image processors, algorithms for image analysis and the application of these techniques to a range of image analysis problems, several of which are in medicine and biology. Salary for all posts will be on the Lecturer Scale £7,100 - £14,126 per annum (under review) plus £1,186 per annum London Allowance.

Applications (no forms) including a full c.v. and names and addresses of two referees should be sent to: Assistant Secretary (Personnel), University College London, Dover Street, London WC1E 6BT. Closing date for application is 22 May 1984. Please quote appropriate reference number in all correspondence. (14617)

University of Cambridge

Computer Laboratory

INFORMATION TECHNOLOGY APPOINTMENT

Assistant Director of Research

Applications are invited for the following appointments under the UGC's "New Blood" and Information Technology Initiatives. The posts are available from 1 October 1984 and for the "New Blood" posts candidates should normally be aged 35 or under.

"NEW BLOOD" LECTURESHIP IN BIOENGINEERING

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THE UNIVERSITY OF LANCASTER

"NEW BLOOD" LECTURESHIPS

Applications are invited for the following Lectureships available from 1 October 1984 in the following Departments and fields:

1. BIOLOGICAL SCIENCES (PLANT CELL PHYSIOLOGY)

This post is intended to complement an existing group team of plant physiologists and biochemists. Applicants should have or expect shortly to obtain a relevant Ph.D. (REF. L039) This post has been previously advertised.

2. ENGINEERING (ENGINEERING DESIGN)

The essential need is for a highly numerate and imaginative mind, but design experience in mechanical or structural engineering and computing skills would be welcome. The research is intellectually very challenging: it is concerned with reconciling the demands of manufacture and of function, particularly structural function and load diffusion. A generic study is proposed, resulting in design aids (including CAD). In addition, the person appointed would contribute to the Department's undergraduate and postgraduate teaching. (REF. L043)

3. ENVIRONMENTAL SCIENCES

The Lectureship is in the field of topographic chemistry and it is intended that the successful candidate should develop measurement techniques for trace atmospheric species applicable at remote "background" locations. Some teaching of environmental chemistry is also anticipated. Proven research ability in atmospheric chemistry is essential, and a knowledge of meteorology would be advantageous. (REF. L044)

4. OPERATIONAL RESEARCH

The above post is intended to contribute to the intellectual and practical development of Decision Support Systems. Applicants should have an interest in the general principles of DSS, or in forms of mathematics which may be useful for DSS, or in the acceptance of DSS by decision makers. (REF. L042)

5. PHYSICS (PARTICLE PHYSICS)

The person appointed will be expected to contribute to a flourishing programme of experimental elementary particle physics on the ALICE experiment at LEP or a future experiment at HERA, and, in due course, contribute in a broad way to the teaching in the Department. Candidates should have gained a Ph.D. or equivalent in the subject and further experience would be valuable. (REF. L041)

6. PSYCHOLOGY AND COMPUTING

This post will be a joint appointment in the Departments of Psychology and Computing. Applicants would normally be expected to possess a qualification in Psychology and to have interests in the psychological aspects of DSS. The appointee will be expected to take part in joint projects between the two departments, to help design, develop and teach courses at undergraduate and postgraduate levels in both departments. (REF. L046)

Candidates should be aged 35 or under and must not currently hold a permanent university appointment in the United Kingdom. Appointment will be at an appropriate point on the Lecturer scale £7,100 - £14,126. Further particulars may be obtained (quoting the appropriate reference) from the Establishment Office, University House, Bailrigg, Lancaster LA1 4YW. Applications (six copies) naming three referees should be sent to the Establishment Office, University House, Bailrigg, Lancaster LA1 4YW, post no. 1 closes on 4 May 1984 and post no. 4 on 31 May 1984. (14623)

University of London

King's College London

Queen Elizabeth College

Chelsea College

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UNIVERSITY OF SURREY

Department of Electronic & Electrical Engineering

The Department of Electronic & Electrical Engineering is expanding its activities following recent appointments to two newly created posts, and applicants are invited for the five posts given below:

1. Reader in System Architecture to join the Software and Control Engineering Group

The successful candidate will have: (i) a proven ability to apply discrete mathematics to the specification and design of information systems, (ii) wide knowledge of modern information technology and its application to research, development and production of computer systems, (iii) experience of industrial product development.

He/she will be expected to research into the refinement and improvement of the techniques for information systems and develop computer systems for supporting these techniques. (REF. 269)

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Universities continued

University of Aberdeen

Department of Therapeutics and Clinical Pharmacology

"NEW BLOOD" LECTURESHIP IN MOLECULAR TOXICOLOGY/CLINICAL PHARMACOLOGY

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Polytechnics continued

GLASGOW COLLEGE OF TECHNOLOGY

The College is a polytechnic type institution of advanced higher education which may be designated a Scottish Central Institution.

RESEARCH ASSISTANT

Salary: £6,234-£6,738

Candidates must normally be in possession of an honours degree or equivalent qualification, and will be expected to register for a higher degree by research.

There is one post to be filled and applicants should be interested in any one of the following areas:

- The use and development of input-output tables for the large firm.
- Chemo-communication in primates: Chemical analysis of exocrine secretions.
- Clinical diagnosis in ophthalmic optics through "Expert" computer-based systems.
- Ethnic minority communities in Scotland.
- The monitoring of patients' vital signs by nurses in a variety of clinical settings.

Application forms from the Establishments Officer, Glasgow College of Technology, Cowcaddens Road, Glasgow G4 0BA (tel: 041-332 7050) to be returned within 14 days of the appearance of this advertisement.

EDWARD MILLER, Director of Education.

(14607)

Strathclyde Department of Education

The Council of the North West Regional Management Centre invites applications from experienced managers from industry, commerce or the public sector, and teachers of management, for the post of

DIRECTOR OF THE N.W.R.M.C.

Salary will be paid in accordance with the Burnham scales for Further Education Head of Department Grade V or VI

Grade V £15390 to £17091

Grade VI £16632 to £18327 (award pending)

The Council will consider awarding the title Professor to a suitably qualified successful candidate.

Details of the post are available by application to The Administrator

North West Regional Management Centre, Woodlands, Southport Road, Chorley, Lancashire, PR7 1QR. Tel: (02572) 68942

Closing date for receipt of completed applications: 4 weeks from the date of appearance of this advertisement.



Thames Polytechnic

School of Electrical and Electronic Engineering

RESEARCH ASSISTANTSHIP IN INFORMATION TECHNOLOGY

Microprocessor-based research projects, strongly supported by industry, are concerned with (i) instrumentation for bulk solid surface topography measurement, (ii) speech processing methods for low cost recognition systems, and (iii) computer-aided design in Electronic Engineering. Physics or Computer Science and will be expected to register for a higher degree.

Salary scale: £5,934-£6,656 inclusive.

Further particulars and application form from the Staffing Officer, Thames Polytechnic, Watlington Street, London SE18 3PP, to be returned by 18th May 1984.

Thames Polytechnic is an equal opportunities employer.

Oxford Polytechnic

POSTGRADUATE RESEARCH OPPORTUNITIES

A number of research opportunities are available in the area of Computer Science. Applicants should have, or expect to obtain, a second honours degree in a Computer related subject. The post involves a small amount of teaching, and is available for one year in the first instance and can be renewed for a second year. Salary £4,547-£5,861 p.a.

Further details are available from the Staffing Officer, Thames Polytechnic, Watlington Street, London SE18 3PP, to be returned by 18th May 1984.

Thames Polytechnic is an equal opportunities employer.

Required for 1 September 1984

LECTURER II OR SENIOR LECTURER IN OFFICE STUDIES

Salary: £7215 - £11568 - £13443 (under review)

Details and application forms (returnable within 14 days of advertisement) from Establishment Clerk, The Polytechnic, Wolverhampton WV1 1SB or Tel. Wolverhampton (0902) 710654 (ansaphone). (14610)

Bristol Polytechnic MARKETING OFFICER REF NO 1/8

As an important contribution to the Polytechnic's drive to maximize educational benefit and income from its considerable short course, consultancy and public relations programmes, together with its marketing facilities, it is intended to appoint a Marketing Officer.

Who will be responsible, under the Assistant Director of Development and Implementation, for the development and implementation of marketing policy.

The person appointed should possess successful sales and experience gained in either a public or private sector organisation. An appropriate professional qualification would be of advantage.

Salary scale: £17,915-£19,685-£21,568-£23,443-£25,324-£27,205-£29,086-£30,967-£32,848-£34,729-£36,610-£38,491-£40,372-£42,253-£44,134-£46,015-£47,896-£49,777-£51,658-£53,539-£55,420-£57,301-£59,182-£61,063-£62,944-£64,825-£66,706-£68,587-£70,468-£72,349-£74,230-£76,111-£77,992-£79,873-£81,754-£83,635-£85,516-£87,397-£89,278-£91,159-£93,040-£94,921-£96,802-£98,683-£100,564-£102,445-£104,326-£106,207-£108,088-£109,969-£111,850-£113,731-£115,612-£117,493-£119,374-£121,255-£123,136-£125,017-£126,898-£128,779-£130,660-£132,541-£134,422-£136,303-£138,184-£140,065-£141,946-£143,827-£145,708-£147,589-£149,470-£151,351-£153,232-£155,113-£156,994-£158,875-£160,756-£162,637-£164,518-£166,399-£168,280-£170,161-£172,042-£173,923-£175,804-£177,685-£179,566-£181,447-£183,328-£185,209-£187,090-£188,971-£190,852-£192,733-£194,614-£196,495-£198,376-£200,257-£202,138-£204,019-£205,900-£207,781-£209,662-£211,543-£213,424-£215,305-£217,186-£219,067-£220,948-£222,829-£224,710-£226,591-£228,472-£230,353-£232,234-£234,115-£235,996-£237,877-£239,758-£241,639-£243,520-£245,401-£247,282-£249,163-£251,044-£252,925-£254,806-£256,687-£258,568-£260,449-£262,330-£264,211-£266,092-£267,973-£269,854-£271,735-£273,616-£275,497-£277,378-£279,259-£281,140-£283,021-£284,902-£286,783-£288,664-£290,545-£292,426-£294,307-£296,188-£298,069-£299,950-£301,831-£303,712-£305,593-£307,474-£309,355-£311,236-£313,117-£314,998-£316,879-£318,760-£320,641-£322,522-£324,403-£326,284-£328,165-£330,046-£331,927-£333,808-£335,689-£337,570-£339,451-£341,332-£343,213-£345,094-£346,975-£348,856-£350,737-£352,618-£354,499-£356,380-£358,261-£360,142-£362,023-£363,904-£365,785-£367,666-£369,547-£371,428-£373,309-£375,190-£377,071-£378,952-£380,833-£382,714-£384,595-£386,476-£388,357-£390,238-£392,119-£393,999-£395,880-£397,761-£399,642-£401,523-£403,404-£405,285-£407,166-£409,047-£410,928-£412,809-£414,690-£416,571-£418,452-£420,333-£422,214-£424,095-£425,976-£427,857-£429,738-£431,619-£433,500-£435,381-£437,262-£439,143-£441,024-£442,905-£444,786-£446,667-£448,548-£450,429-£452,310-£454,191-£456,072-£457,953-£459,834-£461,715-£463,596-£465,477-£467,358-£469,239-£471,120-£473,001-£474,882-£476,763-£478,644-£480,525-£482,406-£484,287-£486,168-£488,049-£489,930-£491,811-£493,692-£495,573-£497,454-£499,335-£501,216-£503,097-£504,978-£506,859-£508,740-£510,621-£512,502-£514,383-£516,264-£518,145-£520,026-£521,907-£523,788-£525,669-£527,550-£529,431-£531,312-£533,193-£535,074-£536,955-£538,836-£540,717-£542,598-£544,479-£546,360-£548,241-£550,122-£552,003-£553,884-£555,765-£557,646-£559,527-£561,408-£563,289-£565,170-£567,051-£568,932-£570,813-£572,694-£574,575-£576,456-£578,337-£580,218-£582,099-£583,980-£585,861-£587,742-£589,623-£591,504-£593,385-£595,266-£597,147-£599,028-£600,909-£602,790-£604,671-£606,552-£608,433-£610,314-£612,195-£614,076-£615,957-£617,838-£619,719-£621,600-£623,481-£625,362-£627,243-£629,124-£631,005-£632,886-£634,767-£636,648-£638,529-£640,410-£642,291-£644,172-£646,053-£647,934-£649,815-£651,696-£653,577-£655,458-£657,339-£659,220-£661,101-£662,982-£664,863-£666,744-£668,625-£670,506-£672,387-£674,268-£676,149-£678,030-£679,911-£681,792-£683,673-£685,554-£687,435-£689,316-£691,197-£693,078-£694,959-£696,840-£698,721-£700,602-£702,483-£704,364-£706,245-£708,126-£710,007-£711,888-£713,769-£715,650-£717,531-£719,412-£721,293-£723,174-£725,055-£726,936-£728,817-£730,698-£732,579-£734,460-£736,341-£738,222-£740,103-£741,984-£743,865-£745,746-£747,627-£749,508-£751,389-£753,270-£755,151-£757,032-£758,913-£760,794-£762,675-£764,556-£766,437-£768,318-£770,199-£772,080-£773,961-£775,842-£777,723-£779,604-£781,485-£783,366-£785,247-£787,128-£789,009-£790,890-£792,771-£794,652-£796,533-£798,414-£800,295-£802,176-£804,057-£805,938-£807,819-£809,700-£811,581-£813,462-£815,343-£817,224-£819,105-£820,986-£822,867-£824,748-£826,629-£828,510-£830,391-£832,272-£834,153-£836,034-£837,915-£839,796-£841,677-£843,558-£845,439-£847,320-£849,201-£851,082-£852,963-£854,844-£856,725-£858,606-£860,487-£862,368-£864,249-£866,130-£868,011-£869,892-£871,773-£873,654-£875,535-£877,416-£879,297-£881,178-£883,059-£884,940-£886,821-£888,702-£890,583-£892,464-£894,345-£896,226-£898,107-£900,000-£901,881-£903,762-£905,643-£907,524-£909,405-£911,286-£913,167-£915,048-£916,929-£918,810-£920,691-£922,572-£924,453-£926,334-£928,215-£930,096-£931,977-£933,858-£935,739-£937,620-£939,501-£941,382-£943,263-£945,144-£947,025-£948,906-£950,787-£952,668-£954,549-£956,430-£958,311-£960,192-£962,073-£963,954-£965,835-£967,716-£969,597-£971,478-£973,359-£975,240-£977,121-£979,002-£980,883-£982,764-£984,645-£986,526-£988,407-£990,288-£992,169-£994,050-£995,931-£997,812-£999,693-£1001,574-£1003,455-£1005,336-£1007,217-£1009,098-£1010,979-£1012,860-£1014,741-£1016,622-£1018,503-£1020,384-£1022,265-£1024,146-£1026,027-£1027,908-£1029,789-£1031,670-£1033,551-£1035,432-£1037,313-£1039,194-£1041,075-£1042,956-£1044,837-£1046,718-£1048,599-£1050,480-£1052,361-£1054,242-£1056,123-£1058,004-£1059,885-£1061,766-£1063,647-£1065,528-£1067,409-£1069,290-£1071,171-£1073,052-£1074,933-£1076,814-£1078,695-£1080,576-£1082,457-£1084,338-£1086,219-£1088,100-£1089,981-£1091,862-£1093,743-£1095,624-£1097,505-£1099,386-£1101,267-£1103,148-£1105,029-£1106,910-£1108,791-£1110,672-£1112,553-£1114,434-£1116,315-£1118,196-£1120,077-£1121,958-£1123,839-£1125,720-£1127,601-£1129,482-£1131,363-£1133,244-£1135,125-£1137,006-£1138,887-£1140,768-£1142,649-£1144,530-£1146,411-£1148,292-£1150,173-£1152,054-£1153,935-£1155,816-£1157,697-£1159,578-£1161,459-£1163,340-£1165,221-£1167,102-£1168,983-£1170,864-£1172,745-£1174,626-£1176,507-£1178,388-£1180,269-£1182,150-£1184,031-£1185,912-£1187,793-£1189,674-£1191,555-£1193,436-£1195,317-£1197,198-£1199,079-£1200,960-£1202,841-£1204,722-£1206,603-£1208,484-£1210,365-£1212,246-£1214,127-£1216,008-£1217,889-£1219,770-£1221,651-£1223,532-£1225,413-£1227,294-£1229,175-£1231,056-£1232,937-£1234,818-£1236,699-£1238,580-£1240,461-£1242,342-£1244,223-£1246,104-£1247,985-£1249,866-£1251,747-£1253,628-£1255,509-£1257,390-£1259,271-£1261,152-£1263,033-£1264,914-£1266,795-£1268,676-£1270,557-£1272,438-£1274,319-£1276,200-£1278,081-£1279,962-£1281,843-£1283,724-£1285,605-£1287,486-£1289,367-£1291,248-£1293,129-£1295,010-£1296,891-£1298,772-£1300,653-£1302,534-£1304,415-£1306,296-£1308,177-£1310,058-£1311,939-£1313,820-£1315,701-£1317,582-£1319,463-£1321,344-£1323,225-£1325,106-£1326,987-£1328,868-£1330,749-£1332,630-£1334,511-£1336,392-£1338,273-£1340,154-£1342,035-£1343,916-£1345,797-£1347,678-£1349,559-£1351,440-£1353,321-£1355,202-£1357,083-£1358,964-£1360,845-£1362,726-£1364,607-£1366,488-£1368,369-£1370,250-£1372,131-£1374,012-£1375,893-£1377,774-£1379,655-£1381,536-£1383,417-£1385,298-£1387,179-£1389,060-£1390,941-£1392,822-£1394,703-£1396,584-£1398,465-£1400,346-£1402,227-£1404,108-£1405,989-£1407,870-£1409,751-£1411,632-£1413,513-£1415,394-£1417,275-£1419,156-£1421,037-£1422,918-£1424,799-£1426,680-£1428,561-£1430,442-£1432,323-£1434,204-£1436,085-£1437,966-£1439,847-£1441,728-£1443,609-£1445,490-£1447,371-£1449,252-£1451,133-£1453,014-£1454,895-£1456,776-£1458,657-£1460,538-£1462,419-£1464,300-£1466,181-£1468,062-£1469,943-£1471,824-£1473,705-£1475,586-£1477,467-£1479,348-£1481,229-£1483,110-£1484,991-£1486,872-£1488,753-£1490,634-£1492,515-£1494,396-£1496,277-£1498,158-£1500,039-£1501,920-£1503,801-£1505,682-£1507,563-£1509,444-£1511,325-£1513,206-£1515,087-£1516,968-£1518,849-£1520,730-£1522,611-£1524,492-£1526,373-£1528,254-£1530,135-£1532,016-£1533,897-£1535,778-£1537,659-£1539,540-£1541,421-£1543,302-£1545,183-£1547,064-£1548,945-£1550,826-£1552,707-£1554,588-£1556,469-£1558,350-£1560,231-£1562,112-£1563,993-£1565,874-£1567,755-£1569,636-£1571,517-£1573,398-£1575,279-£1577,160-£1579,041-£1580,922-£1582,803-£1584,684-£1586,565-£1588,446-£1590,327-£1592,208-£1594,089-£1595,970-£1597,851-£1599,732-£1601,613-£1603,494-£1605,375-£1607,256-£1609,137-£1611,018-£1612,899-£1614,780-£1616,661-£1618,542-£1620,423-£1622,304-£1624,185-£1626,066-£1627,947-£1629,828-£1631,709-£1633,590-£1635,471-£1637,352-£1639,233-£1641,114-£1642,995-£1644,876-£1646,757-£1648,638-£1650,519-£1652,400-£1654,281-£1656,162-£1658,043-£1659,924-£1661,805-£1663,686-£1665,567-£1667,448-£1669,329-£1671,210-£1673,091-£1674,972-£1676,853-£1678,734-£1680,615-£1682,496-£1684,377-£1686,258-£1688,139-£1690,020-£1691,901-£1693,782-£1695,663-£1697,544-£1699,425-£1701,306-£1703,187-£1705,068-£1706,949-£1708,830-£1710,711-£1712,592-£1714,473-£1716,354-£1718,235-£1720,116-£1721,997-£1723,878-£1725,759-£1727,640-£1729,521-£1731,402-£1733,283-£1735,164-£1737,045-£1738,926-£1740,807-£1742,688-£1744,569-£1746,450-£1748,331-£1750,212-£1752,093-£1753,974-£1755,855-£1757,736-£1759,617-£1761,498-£1763,379-£1765,260-£1767,141-£1769,022-£1770,903-£1772,784-£1774,665-£1776,546-£1778,427-£1780,308-£1782,189-£1784,070-£1785,951-£1787,832-£1789,713-£1791,594-£1793,475-£1795,356-£1797,237-£1799,118-£1800,999-£1802,880-£1804,761-£1806,642-£1808,523-£1810,404-£1812,285-£1814,166-£1816,047-£1817,928-£1819,809-£1821,690-£1823,571-£1825,452-£1827,333-£1829,214-£1831,095-£1832,976-£1834,857-£1836,738-£1838,619-£1840,500-£1842,381-£1844,262-£1846,143-£1848,024-£1849,905-£1851,786-£1853,667-£1855,548-£1857,429-£1859,310-£1861,191-£1863,072-£1864,953-£1866,834-£1868,715-£1870,596-£1872,477-£1874,358-£1876,239-£1878,120-£1880,001-£1881,882-£1883,763-£1885,644-£1887,525-£1889,406-£1891,287-£1893,168-£1895,049-£1896,930-£1898,811-£1900,692-£1902,573-£1904,454-£1906,335-£1908,216-£1910,097-£1911,978-£1913,859-£1915,740-£1917,621-£1919,502-£1921,383-£1923,264-£1925,145-£1927,026-£1928,907-£1930,788-£1932,669-£1934,550-£1936,431-£1938,312-£1940,193-£1942,074-£1943,955-£1945,836-£1947,717-£1949,598-£1951,479-£1953,360-£1955,241-£1957,122-£1959,003-£1960,884-£1962,765-£1964,646-£1966,527-£1968,408-£1970,289-£1972,170-£1974,051-£1975,932-£1977,813-£1979,694-£1981,575-£1983,456-£1985,